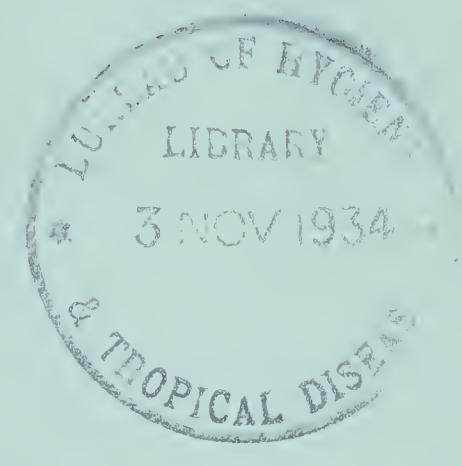


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COUNTY COUNCIL OF SALOP.



ANNUAL REPORT

OF THE

County Medical Officer of Health.

1933.

WILLIAM TAYLOR, M.D., D.P.H.

SHREWSBURY,
August, 1934.



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To the Chairman and Members of the Public Health and Housing Committee
of the Salop County Council.

MR. CHAIRMAN, LADIES, AND GENTLEMEN,

I have the honour to present the Annual Report for 1933 which has been drawn up in accordance with the requirements of the Memorandum issued by the Ministry of Health, but matters upon which it has seemed desirable to enlarge have been more fully dealt with in it.

It is of interest to note that, with the exception of the years 1927 and 1931, the infant mortality rate for 1933 is the lowest which has been recorded in this county ; and that, of the infant deaths which took place during the year, two-thirds were due to irremediable congenital defects. As regards maternal deaths, the fact that one-half of those investigated during the past six years have taken place as a result of a first confinement is not without significance.

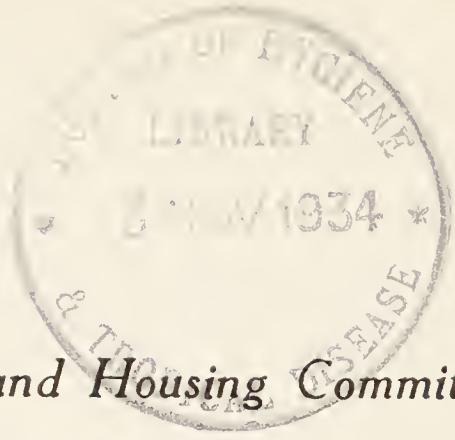
I would draw special attention to that part of the Report for which I am indebted to Dr. T. R. Elliott, Tuberculosis Medical Officer, describing the results so far obtained under the scheme for dealing with babies born to tuberculous mothers, which was introduced in this County in 1923.

I am,

Your obedient Servant,

WILLIAM TAYLOR.

COUNTY HEALTH OFFICE,
COLLEGE HILL,
SHREWSBURY,
August, 1934.



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STAFF.

County Medical Officer of Health and School Medical Officer.
WILLIAM TAYLOR, M.D., D.P.H.

Deputy County Medical Officer of Health and Deputy School Medical Officer.
B. A. ASTLEY-WESTON, M.B., Ch.B., D.P.H.

Tuberculosis Medical Officers.

A. C. WATKIN, M.R.C.S., L.R.C.P., D.P.H.
T. R. ELLIOTT, L.R.C.P.I., L.R.C.S.I.

Assistant School and Child Welfare Medical Officers.

K. PRIESTLEY, L.S.A.
MABEL BLAKE, M.B., Ch.B.
§L. WILSON EVANS, M.C., M.B., B.S., D.P.H.
||W. H. HARRIS, M.D., D.P.H.
SYDNEY S. PROCTOR, M.D., D.P.H.

Dental Surgeons.

STEPHAN KEENAN, L.D.S.
FRANK H. BIRCH, H.D.D., L.D.S.
GERALD R. CATCHPOLE, L.D.S.

Organiser of Physical Training.

MRS. K. W. DAVEY, Diploma of the Chelsea College of Physical Education.

Inspector of Midwives and County Health Lecturer.

MRS. E. M. HART, Certificate of the C.M.B. and Sanitary Inspector's Certificate.
(Died 29th May, 1934).
MISS MONICA DEMANT, F.R.N., S.R.N., C.M.B. Certificate, Health Visitors Certificate.
(Appointed 1st September, 1934).

Assistant Inspector of Midwives (part-time).

MISS G. C. COLLINS, Health Visitors Certificate and Certificate of C.M.B.

County Analyst.

HAROLD LOWE, M.Sc., F.I.C.

Health Visitors and School Nurses.

*†MISS C. M. BINDLOSS.
*†MISS J. A. BRODERSEN.
*MISS B. CONNELLY.
*†MISS M. DORRICOTT.
*†MISS E. L. GRIFFITHS.

MISS E. M. GRIFFITHS.
*†MISS G. GILSENAN.
†MRS. M. M. LOWRANCE.
*MISS E. Q. MASON.
*MISS G. M. MORGAN.

*†MISS A. K. O'CONNELL.
†MISS G. L. THOMAS.
*MISS E. DAVIES.
*MISS M. PARRY.

Obstetrical Consultant and Consultant under the Puerperal Fever and Puerperal Pyrexia Regulations, 1926.

R. L. E. DOWNER, M.D., M.C.O.G.

Venereal Diseases Medical Officer (part-time).
COL. J. GRECH, D.S.O., M.R.C.S., L.R.C.P.**Sister-in-Charge V.D. Clinic.**
MRS. D. A. MURRAY, S.R.N., F.R.N.**Prees Heath Sanatorium.**
MISS M. A. TREBLE, *Matron.***County Home for Ailing Babies.**
MISS M. L. CROWE, *Matron.***County Council Hospital.**
MISS J. P. COCHRAN, S.R.N. and C.M.B. Certificate, *Matron.*
SAMUEL BURKE, M.R.C.S., L.R.C.P., *Resident Medical Officer.***Clerical Staff.**
W. H. JONES, Chief Clerk, and Eleven Assistants.

§ Also Medical Officer of Health for the Urban and Rural Districts of Oswestry. || Also Medical Officer of Health for the Urban and Rural Districts of Ellesmere. * Holds C.M.B. Certificate.
† Holds Health Visitors Certificate. † Holds Certificate of London Obstetrical Society.

District Medical Officers of Health.

Name.	Address.	District or Districts.						
		Urban.		Rural.				
		Name.	Acreage.	Population (1931 Census)	Name.	Acreage.	Population (1931 Census)	
J. DALLEWY, M.R.C.S., L.R.C.P.	Wem.	Wem.	452	2,157	Wem.	51,999	8,436	
L. E. DICKSON, M.D., M.R.C.S., L.R.C.P.	Bridgnorth.	Bridgnorth.	2,822	5,151	Bridgnorth.	70,717	8,293	
L. WILSON EVANS, M.C., M.B., B.S., D.P.H.	Oswestry.	Oswestry.	1,887	9,754	Oswestry.	60,379	16,603	
M. GEPP, L.R.C.P., L.R.C.S., D.P.H.	Shrewsbury	Bishop's Castle. Church Stretton. Wenlock. Whitchurch	1,867	1,352	Atcham. Chirbury. Church Stretton. Clun. Whitchurch	125,194 27,045	22,651 3,059	
J. A. K. GRIFFITHS, M.B., M.R.C.S., L.R.C.P.			978	1,704	45,106	4,524		
W. H. HARRIS, M.D., D.P.H.			22,657	14,149	82,206	5,945		
A. MACQUEEN, M.D.			4,783	6,017	11,702	2,091		
A. D. SYMONS, M.D., D.P.H.	Kington.	—	—	—	Teme.	23,090	1,563	
A. E. WHITE, M.B., C.M., L.R.C.P., L.R.C.S., D.P.H.	Shrewsbury	Ellesmere.	1,206	1,872	Ellesmere.	51,115	7,324	
Market Drayton. Shrewsbury.		Market Drayton.	1,216	4,749	Drayton.	50,168	7,381	
Shrewsbury. Wellington.		Shrewsbury	3,525	32,372	—	—	—	
Dawley. Ludlow.		Dawley. Ludlow.	2,790 420	7,359 5,642	Burford. Cleobury Mortimer. Ludlow. Newport. Shifnal. Wellington.	7,798	1,159	
Newport. Oakengates. Wellington.		Newport. Oakengates. Wellington.	768	3,437	44,338	6,925		
2,329			2,329	11,190	66,348	8,677		
700			700	8,186	22,808	5,498		
						39,915	7,707	
						33,472	11,229	

Poor Law Medical Out-Relief.

Name of Area.	County Districts comprised in Area.	Acreage.	Population (1931).	No. of Relief Districts.	No. of Relieving Officers.	District Medical Officers.
Bridgnorth ..	{ Bridgnorth U. & R. Cleobury Mortimer R.	{ 117,877	20,369	2	2	Dr. J. Anderson, Dr. L. E. Dickson, Dr. G. R. Kennedy, Dr. R. G. Addenbrooke, Dr. O. J. M. Kerrigan.
Clun...	{ Bishop's Castle U. : Chirbury R. : Clun R. : Teme R. : ..	{ 134,208	11,919	2	2	Dr. G. Wheldale Stanley, Dr. R. E. G. Phillips, Dr. A. Clinton Taylor, Dr. J. Adams, Dr. T. H. Gandy, Dr. G. H. H. Booth, Dr. J. A. K. Griffiths, Dr. W. B. Darroll, Dr. H. R. Cross.
Drayton ..	{ Drayton U. & R. : Wem U. & R. : Whitchurch U. & R. : ..	{ 120,320	30,831	2	2	Dr. J. R. Mitchell, Dr. J. Dallewy, Dr. C. W. Eames, Dr. V. E. Somerset, Dr. I. B. Richardson, Dr. A. H. Clough, Dr. W. King Hay, Dr. Frances Lilian Lewis, Dr. A. Lees Low, Dr. W. Hall.
Ludlow ..	{ Burford R. : Church Stretton U. & R. : Ludlow U. & R. : ..	{ 120,650	21,706	3	3	Dr. H. Gooch, Dr. J. McClintonck, Dr. F. W. Hudson-Bigley, Dr. C. H. Flory, Dr. J. Anderson, Dr. C. Fenwick, Dr. H. O. Watson, Dr. A. Sanders Green.
Oswestry ..	{ Ellesmere U. & R. : Oswestry U. & R. : ..	{ 114,574	35,553	3	3	Dr. W. B. A. Lewis, Dr. J. H. Crofton, Dr. H. S. O'Conor, Dr. D. J. Micah, Dr. C. E. Salt, Dr. J. H. Matthews, Dr. C. D. Rogers, Dr. A. C. Heard, Dr. E. H. Udall for Oswestry Institution.
Shrewsbury	{ Atcham R. : Shrewsbury U. : ..	{ 128,732	55,023	3	3	Dr. W. E. Gemmell, Dr. J. H. Marshall, Dr. J. G. Glynn Pigott, O.B.E., Dr. G. M. Westwood, Dr. C. W. Cassell, Dr. T. J. Gittens, Dr. C. U. Whitney.
Wellington	{ Newport U. & R. : Oakengates U. & R. : Wellington U. & R. : ..	{ 60,077	39,540	2	2	Dr. H. W. J. Hawthorn, Dr. D. L. MacKenna, Dr. G. E. Elkington, M.C., Dr. J. R. Pooler.
Wenlock ..	{ Dawley U. : Shifnal R. : Wenlock U. : ..	{ 65,362	29,215	3	3	Dr. C. U. Whitney, Dr. H. C. Woodhouse, Dr. R. S. Mitchell, Dr. J. G. Boon, Dr. F. W. Hudson-Bigley, Dr. S. B. Legge, Dr. D. J. M. Legge.
			861,800	244,156	20	

Public Vaccinators and Vaccination Districts.

Vaccination District.	Vaccination Officer.	Public Vaccinators.
Bridgnorth ..	A. H. Reynolds ..	C. A. Hodges, L. E. Dickson, G. R. Kennedy.
Church Stretton ..	A. Dillon Smith ..	C. H. Flory, F. W. Hudson-Bigley, H. Gooch, J. McClintock.
Cleobury Mortimer ..	S. Whitehead ..	R. G. Addenbrooke, W. A. N. Robinson.
Clun	W. J. Beavan ..	G. H. H. Booth, W. B. Darroll, J. A. K. Griffiths.
	A. Lloyd Davies ..	S. J. Stewart, G. W. Stanley
	M. George ..	H. R. Cross, T. H. Gandy.
	F. E. King ..	J. Adams, A. C. Taylor.
Drayton	G. E. Axon ..	Walter Hall, W. King Hay, A. Lees Low, Frances L. Lewis.
Ellesmere	J. H. Butler ..	A. C. Heard.
	P. J. Whiston ..	C. D. Rogers.
Ludlow	R. G. Brookes ..	C. Fenwick, H. O. Watson.
	R. J. Price ..	C. H. Flory, C. A. Hodges.
	D. J. Morris ..	A. Sanders Green.
Madeley	W. Edge ..	J. G. Boon, F. W. Hudson-Bigley.
	E. P. Smith ..	C. U. Whitney.
	B. H. Ellis ..	J. B. Robertson.
Newport	G. G. Crickmer ..	G. E. Elkington, D. L. MacKenna, J. R. Pooler.
Oswestry	T. Pughe-Jones ..	J. H. Crofton, W. B. A. Lewis, J. Hugo Matthews, H. S. O'Conor, C. E. Salt, E. H. Udall.
Shifnal	L. G. Harris ..	G. R. Kennedy, D. J. M. Legge, S. B. Legge.
Shrewsbury	E. P. Everest, M.B.E.	C. W. Cassell, W. E. Gemmell, T. J. Gittins, J. H. Marshall, H. B. MacLeod, G. M. Westwood
Wellington	R. Gwynne ..	H. W. J. Hawthorn, D. L. MacKenna.
Wem	R. J. Clayton ..	J. Dallewy, C. W. Eames, J. R. Mitchell, V. E. Somerset.
Whitchurch	E. Jones ..	A. H. Clough.

Hospital Accommodation at Public Assistance Institutions in 1933.

Name of Institution.	Sick Wards.		Medical Officer.	Number of			
	No. of beds.	Average No. of beds. used.		Trained Nurses.	Proba- tioner. Nurses.	Assist- ant Nurses.	Male Attend- ants.
Berrington ..	174	151	Resident*	7	30	..	..
Bishop's Castle ..	33	27	Visiting ..	1	..	3	1
Bridgnorth ..	44	38	Visiting ..	..	2	3	..
Ironbridge ..	73	55	Visiting ..	1	..	4	..
Ludlow ..	52	25	Visiting ..	1	..	4	..
Market Drayton ..	42	26	Visiting ..	1	..	2	..
Newport ..	35	28	Visiting ..	1	..	2	..
Oswestry ..	91	76	Visiting ..	4	..	8	..
Shifnal ..	27	20	Visiting ..	1	..	2	..
Wellington ..	109	97	Visiting ..	4	4	4	1
Whitchurch ..	26	18	Visiting ..	1	..	2	..
	706	561		22	36	34	2

* Also Visiting Consultant.

Voluntary Hospital Accommodation.

Name and Situation.	No. of beds, including cots.	Average number of beds occupied, 1933.	Facilities provided.
Bridgnorth and South Shropshire Infirmary, Bridgnorth	40	*	a, b, c, d, f, k, m, n, p, q, r.
St. Catherine's Cottage Hospital, Clun ..	7	*	a, d.
Cottage Hospital, Ellesmere	11	*	a, b, d, p.
Cottage Hospital, Ludlow	9	*	a, b, m, q.
Cottage Hospital, Market Drayton ..	13	7	a, b, d, m, p.
Lady Boughey Cottage Hospital, Newport ..	15	*	a, b, d, e, m, n, p, q.
Cottage Hospital, Oswestry	21	*	a, b, d, m, p.
Cottage Hospital, Shifnal	12	8	a, b, c, d, f, n, p, q.
District Cottage Hospital, Wellington ..	18	*	a, b, d, m, n.
Cottage Hospital, Whitchurch	13	7	a, b, d, m, q.
Shropshire Orthopaedic Hospital and Agnes Hunt Surgical Home, Oswestry ..	320	*	b, d, e, f, j, k, m, n, p, q.
Royal Salop Infirmary, Shrewsbury ..	156	*	a, b, c, d, f, j, k, m, n, o.
Eye, Ear and Throat Hospital, Shrewsbury ..	53	42	b, d, f, g, h, j, k, l.
Lady Forester Hospitals—			
Broseley	29	*	a, b, c, p, r.
Much Wenlock	29	*	a, b, c, k, l, n, p, r.
King Edward VII. Memorial Sanatorium, Shirlett	62	62	k, m.

Hospitals used outside Salop include the Hereford General Hospital, Wolverhampton Royal Hospital, Stafford Infirmary, Wolverhampton Eye Hospital, and the Kidderminster Hospital.

KEY.—**a**=General Medical and Surgical Treatment; **b**=Operating Theatre; **c**=Maternity Beds; **d**=Children's Beds; **e**=Orthopaedic Department; **f**=Dental Department; **g**=Nose, Throat and Ear Department; **h**=Ophthalmic Department; **i**=Dermatological Department; **j**=Laboratory; **k**=Light Therapy; **l**=Radium Treatment; **m**=X-Ray Facilities; **n**=Massage Treatment; **o**=Gynaecological Department; **p**=Private Ward; **q**=Open-Air Verandah; **r**=Shelters; * =No information.

Hospital Beds available in the County of Salop classified according to Type of Case and as far as possible to Sex.

Type of Case.	Provided at	No. of beds.			
		Total.	Male.	Female.	M. or F.
General Medical ..	Bridgnorth and South Shropshire Infirmary ..	14	..	..	14
	St. Catherine's Cottage Hospital, Clun ..	6	3	3	..
	Royal Salop Infirmary, Shrewsbury ..	56	26	26	4
		76	29	29	18
General Surgical ..	Royal Salop Infirmary ..	68	40	26	2
General Medical and Surgical	*Berrington Hospital (P.A.I.)	126	63	63	..
	Bridgnorth and South Shropshire Infirmary ..	19	..	..	19
	Ellesmere Cottage Hospital	10	..	..	10
	Lady Forester Cottage Hospital, Broseley ..	23	..	..	23
	Lady Forester Memorial Hospital, Much Wenlock	25	..	..	25
	Ludlow Cottage Hospital	9	..	..	9
	Market Drayton Cottage Hospital	12	..	..	12
	Newport, Lady Boughey Cottage Hospital	14	..	..	14
	Oswestry Cottage Hospital	19	..	..	19
	Shifnal Cottage Hospital	8	..	..	8
	Wellington Cottage Hospital	14	..	..	14
	Whitchurch Cottage Hospital	13	..	..	13
		292	63	63	166
Children. ..	*Berrington Hospital (P.A.I.)	18	..	..	18
	Bridgnorth and South Shropshire Infirmary ..	4	..	..	4
	County Home for Ailing Babies, Wellington ..	16	..	..	16
	Ellesmere Cottage Hospital	1	..	..	1
	Market Drayton Cottage Hospital	1	..	..	1
	Newport (Lady Boughey) Cottage Hospital	1	..	..	1
	Oswestry Cottage Hospital	2	..	..	2
	Public Assistance Institutions (excluding Berrington)	55	..	..	55
	Royal Salop Infirmary	22	..	..	22
	Shifnal Cottage Hospital	1	..	..	1
	Wellington Cottage Hospital	4	..	..	4
		125	..	..	125
Maternity. ..	*Berrington Hospital (P.A.I.)	22	..	22	..
	Bridgnorth and South Shropshire Infirmary ..	3	..	3	..
	Lady Forester Cottage Hospital	6	..	6	..
	Lady Forester Memorial Hospital	4	..	4	..
	Public Assistance Institution (excluding Berrington)	15	..	15	..
	Royal Salop Infirmary	10	..	10	..
	Shifnal Cottage Hospital	3	..	3	..
		63	..	63	..
Venereal Diseases ..	V.D. Clinic, Shrewsbury	4	2	2	..
Tuberculosis ..	Shirlett Sanatorium	62	..	..	62
	Prees Heath Sanatorium	11	..	..	11
	*Berrington Hospital	8	4	4	..
	Public Assistance Institution (shelters)	20	11	9	..
		101	15	13	73

* Now known as "County Council Hospital."

Type of Case.	Provided at	Total.	Male.	Female.	No. of beds. M. or F.
Chronic Sick	Public Assistance Institutions	442	237	205	..
Mental	Salop Mental Hospital	896	436	460	..
Mental Deficiency ..	{ Church Stretton Public Assistance Institution .. 5 Madeley Public Assistance Institution .. 25	30	10	20	..
Orthopaedic	Shropshire Orthopaedic Hospital	320	..	..	320
Eye, Ear, Nose and Throat ..	Eye, Ear and Throat Hospital	53	..	..	53
Puerperal Fever and Puerperal Pyrexia	*Berrington Hospital (P.A.I.)			as occasion arises.	
Small-pox	See page 20	28	..	..	28
Other Infectious Diseases ..	See page 20	87	..	..	87

In addition, the County Council has made arrangements with the Royal Hospital, Wolverhampton, and Cleveland House, Wolverhampton, for the treatment of persons suffering from venereal diseases, and with the Mrs. Legge Memorial Home, Wolverhampton, for the admission of unmarried mothers without homes.

* Now known as "County Council Hospital."

STATISTICS AND SOCIAL CONDITIONS OF THE AREA.

Area (in acres) of Administrative County	..	..	..	..	..	..	861,800
Population (Census 1931)	..	..	..	..	..	..	244,156
	(	for Birth-rates and Death-rates	..	..	..	..	243,900
Estimated population		Urban—for Birth-rates and Death-rates			..	..	117,000
Mid Year 1933.		Rural—for Birth-rates and Death-rates			..	..	126,900
Number of Inhabited Houses (Census 1931)	..	..	..	..	..	..	59,553
Number of Families or separate Occupiers (Census 1931)	..	..	..	..	..	..	60,904
Rateable Value	..	..	..	..	..	..	£982,320
Sum represented by a penny rate	..	..	..	..	..	..	£4,093

While Shropshire is largely a rural county in which milk production and farm work generally find employment for a large section of the population, there are also certain areas in which coal mining and work in iron produce represent the chief industries. No general statement can be made describing the occupations followed in urban areas, as such are very varied, but those parts of the county which can be described as in any sense "industrial" are very limited in size and number.

Although the unemployment problem is less serious in a rural county such as Shropshire than in the area of a highly industrialised community, there are certain parts of the county (of which the Oakengates district may be cited as an example) in which unemployment is very prevalent. There is, however, so far no evidence that the health of the community as a whole has been adversely affected and, in so far as the findings of School Medical Inspection can be utilised to serve as a criterion, the health of the inhabitants of the county has been very well maintained.

Extracts from Vital Statistics of Registrar General.

	Male.		Female.		Male & Female.		Rates.		
	1932	1933	1932	1933	1932	1933	1932	1933	
Births	Total ..	1,919	1,862	1,855	1,802	3,774	3,664	15.44	15.02
	Legitimate ..	1,812	1,735	1,747	1,680	3,559	3,415	14.56	14.00
	Illegitimate ..	107	127	108	122	215	249	.88	1.02
Still-births ..	74	77	75	86	149	163	.61	.67	
Deaths : Total ..	1,597	1,601	1,623	1,599	3,220	3,200	13.17	13.12	
Infant Mortality ..	108	111	122	86	230	197	61	54	
Legitimate Births	99	97	109	82	208	179	58	52	
Illegitimate do...	9	14	13	4	22	18	102	72	

Deaths of women dying in, or in consequence of Child-birth :—	1927	1928	1929	1930	1931	1932	1933
Total	17	16	14	22	21	15	21
From Sepsis	3	5	2	7	6	10	13
From other causes	14	11	12	15	15	5	8
Deaths from Measles (all ages)	13	13	7	12	10	4	14
,, Whooping Cough (all ages) ..	9	14	20	6	14	23	17
,, Diarrhoea (under 2 years of age)	8	14	27	17	11	8	7

POPULATION.

Below are given particulars of the population of the County at the time of the last four census returns, and the Registrar-General's estimate of the population at the middle of 1932 and 1933 :—

1901 (Census)	..	..	239,783	1932 (estimated population)	244,400
1911	„	..	246,307	1933	„
1921	„	..	243,062		243,900
1931	„	..	244,156		

Urban and Rural Districts (Population).

URBAN DISTRICTS.	Census Population.			RURAL DISTRICTS.	Census Population.			Estim- ated Popu- lation.
	1921	1931	Estim- ated Popu- lation.		1921	1931	1933	
Bishop's Castle M.B.	1267	1352	1383	Atcham	..	21981	22655	21900
Bridgnorth M.B.	5141	5151	5202	Bridgnorth	..	8570	8292	8075
Church Stretton	1669	1705	1697	Burford	..	1268	1159	1079
Dawley	7388	7363	7341	Chirbury	..	3214	3058	2940
Ellesmere	1832	1872	1971	Church Stretton	..	4517	4524	4408
Ludlow M.B.	5674	5642	5613	Cleobury Mortimer	7299	6925	6826	
Market Drayton	4714	4749	4845	Clun	..	6244	5950	5921
Newport	3054	3439	3386	Drayton	..	7155	7380	7208
Oakengates	11345	11189	11060	Ellesmere	..	8009	7323	7455
Oswestry M.B.	9785	9754	9936	Ludlow	..	8980	8677	8535
Shrewsbury M.B.	31006	32370	32220	Newport	..	5745	5499	5406
Wellington	8146	8185	9173	Oswestry	..	16399	16603	16160
Wem	2172	2157	2199	Shifnal	..	7670*	7707*	7711
Wenlock M.B.	13714	14152	13830	Teme	..	1649	1563	1573
Whitchurch	5653	6016	6144	Wellington	..	11207	11227	11220
				Wem	..	8583	8434	8446
				Whitchurch	..	2012	2090	2037

* To this number must be added the population of the Staffordshire parishes of Blymhill and Weston administered by the Shifnal Rural District Council. The population of these parishes at the 1921 census was 689, and at the 1931 census 661, making a total of 8,355 and 8,368 respectively for the Rural District.

MARRIAGES.

The number of marriages in the Registration County during the year was 1,799, an increase of 37 as compared with 1932.

Years	Marriages.
1921—1925	1927
1926—1930	1903
1931	1917
1932	1762
1933	1799

1927 } Yearly average.

BIRTHS AND DEATHS.

Number of Births and Deaths, with birth-rates and death-rates for the last five years.

Year.	Live Births.	Deaths.	Natural increase in population.	Birth-rates.	Death-rates.
1929	4118	3354	764	16.89	13.79
1930	4095	2949	1146	16.79	12.12
1931	3952	3094	858	16.19	12.70
1932	3774	3220	554	15.44	13.17
1933	3664	3200	464	15.02	13.12

Birth-rates and death-rates of each of the Sanitary Districts for the year 1933.

Urban Districts.	Birth-rates.	Death-rates.	Rural Districts.	Birth-rates.	Death-rates.
Bishop's Castle	10.12	14.46	Atcham	14.25	11.32
Bridgnorth	12.88	13.84	Bridgnorth	17.09	14.24
Church Stretton	6.48	12.96	Burford	11.12	9.27
Dawley	17.57	13.89	Chirbury	14.29	11.56
Ellesmere	10.15	13.70	Church Stretton	15.19	15.20
Ludlow	13.54	12.47	Cleobury Mortimer ..	18.90	14.06
Market Drayton	14.65	11.14	Clun	13.51	15.03
Newport	12.40	14.77	Drayton	19.84	11.93
Oakengates	13.38	12.75	Ellesmere	20.12	13.15
Oswestry	15.10	12.48	Ludlow	18.04	13.71
Shrewsbury	14.99	12.19	Newport	13.69	19.61
Wellington	13.84	12.97	Oswestry	13.92	12.00
Wem	10.46	12.28	Shifnal	16.21	14.14
Wenlock	14.75	15.91	Teme	15.26	12.08
Whitchurch	15.95	16.11	Wellington	15.86	11.59
	14.34	13.27	Wem	12.79	12.79
			Whitchurch	12.27	10.80
				15.65	12.99

Births.—There were 3,664 births during the year 1933, a decrease of 110 as compared with the previous year. This represents a fall in the birth-rate from 15.44 to 15.02 per 1,000 of the population, and is the lowest yet recorded. Although the decline in the birth-rate is comparatively small, it must be remembered that it has been almost continuous since 1920, when it stood at 24.73. The birth-rate for England and Wales for 1933 was 14.4 per 1,000 of the population, and in 1920 was 25.4.

Deaths.—The number of deaths in the county in 1933 was 3,200, a fall of 20 as compared with the preceding year. The death-rate per 1,000 of the population has decreased by .05, and stands at 13.12 for the year under consideration, or .82 more than that for England and Wales.

Principal Causes of Death.

	Yearly average. 1926—1930	1931	1932	1933
Heart Disease	559	690	684	672
Other Circulatory Diseases	131	142	177	150
Cerebral Haemorrhage	226	204	222	248
Congenital Debility	128	118	141	132
Influenza	120	84	193	158
Bronchitis	156	150	141	133
Pneumonia	157	159	135	142
Tuberculosis { Pulmonary ..	129	155	126	125
Other forms ..	38	37	34	33
Cancer, Malignant Disease ..	377	409	393	384

It will be observed that heart disease, cerebral haemorrhage and other diseases of the circulatory system accounted for 1,070, or a little more than one-third, of the 3,200 deaths which took place during the year. Practically all of these deaths must be attributed to degenerative changes—the result of old age, dietary errors, and the conditions of life which modern civilisation imposes. The number of deaths from congenital debility, which was 132, is very high when one remembers that this figure represents deaths of children under one year of age. There is a direct relationship between deaths due to this cause and the health of the child-bearing section of the population. An improvement in the health of the mothers therefore could be expected to result in a decrease in the number of deaths due to congenital debility. The number of deaths from cancer is 384, a fall of 9 as compared with the previous year. The death-rate from cancer has shown an annual tendency to rise over a long number of years, and the present rate of 1.574, although lower than the rates for the two preceding years, is higher than the average rate for any of the five-yearly periods from 1901 to 1930.

The following table shows the position with regard to the chief matters referred to for each five-yearly period from 1901 to 1930, and for the years 1931, 1932 and 1933 individually:—

Periods.	Birth-rates.	Death-rates.	Infant Mortality Rate per 1,000 Live Births.	Death-rates. from Phthisis.	Death-rates. from Cancer.
1901—1905 ..	26.34	15.2	102	.938	1.025
1906—1910 ..	23.98	14.64	92	.948	1.093
1911—1915 ..	21.21	13.83	82	.804	1.156
1916—1920 ..	19.16	14.55	71	.808	1.382
1921—1925 ..	19.71	12.49	60	.614	1.374
1926—1930 ..	17.17	12.53	56	.529	1.546
1931	16.19	12.7	51	.636	1.679
1932	15.44	13.17	61	.515	1.608
1933	15.02	13.12	54	.513	1.574

INFANT MORTALITY.

Out of 3,664 children born in 1933, 197 died before reaching the age of twelve months. This gives an infant mortality rate of 54 per thousand, seven less than in 1932 and ten less than the corresponding figure for England and Wales, for the year under consideration. With the exception of the years 1927 (when the figure was 48 per thousand), and of 1931 (when it was 51), the infant mortality rate for 1933 is the lowest which has been recorded in this county. *The fact that premature births and congenital defects accounted for 66 per cent. of the deaths of infants under one year of age shows the difficulty of reducing the infant death-rate below a certain level, as congenital defects, being present at birth, are almost all irremediable.* If there had been no deaths due to defects present at birth, the infant mortality rate would only have been 18 per thousand: or, alternatively, if it had been possible to save the life of every child not suffering from a congenital defect the infant death-rate would still have been as high as 36 per thousand births. An inquiry into the health of the mothers of infants whose deaths are due to congenital defects would probably indicate directions in which steps might be taken to bring about a further reduction in the infant death-rate.

Of the eight babies who died from tuberculosis, it has been ascertained that in four of the cases infection was probably of human origin, and in three of bovine. In the eighth case, the information available is not sufficient to justify the expression of an opinion.

Particulars relating to Infant Mortality since 1905.

	Average for years					No. for years			
	1905 to 1909	1910 to 1914	1915 to 1919	1920 to 1924	1925 to 1929	1930	1931	1932	1933
Births ..	5955	5427	4441	5137	4277	4095	3952	3774	3664
Total deaths under one year ..	561	444	335	319	244	235	203	230	197
Measles and Whooping Cough ..	34	22	19	14	11	7	5	10	11
Influenza .. ..	..	..	11	3	5	1	1	8	2
Other Infectious Diseases ..	5	1	1	0	0	0	0	0	1
Tuberculous Diseases	19	12	6	6	4	3	5	3	8
Convulsions and Meningitis (not tuberculous)	60	42	..	..	..	..	..	..	..
Bronchitis	46	33	31	22	10	8	4	10	4
Pneumonia	65	43	34	32	32	24	33	27	9
Diarrhoea	22	14	15	20	11	15	8	4	6
Premature birth and Congenital defects, &c	128	119	..	..	124	125	118	139	132
Atrophy, Debility and Marasmus ..	96	74	..	..	..	..	..	..	..

By stating the rates for five-yearly periods up to 1930, a more accurate representation is given of the progress which has been made. Too much importance should not be attached to the figures for individual years in the case of any of the Sanitary Districts, as the smallness of the numbers concerned makes for wide variations from year to year, but it will be observed that the five-yearly periods bring out the fact that the rate for all the urban districts when worked out is greater than that for all the rural districts.

Infant Mortality Rate since 1901 for each Sanitary District.

SANITARY DISTRICTS.	Average for years						Rate for years		
	1901— 1905	1906— 1910	1911— 1915	1916— 1920	1921— 1925	1926— 1930	1931	1932	1933
URBAN.									
Bishop's Castle	82	82	127	62	34	37	0	0	71
Bridgnorth	108	128	102	91	72	48	38	52	75
Church Stretton	116	90	100	54	16	67	0	0	0
Dawley	101	115	96	69	65	49	37	55	39
Ellesmere	92	84	47	79	54	72	43	114	50
Ludlow	108	104	77	93	53	58	11	61	66
Market Drayton .. ..	..	..	79	116	90	76	81	41	28
Newport	120	89	86	75	39	45	22	34	119
Oakengates	124	107	94	79	74	73	10	42	47
Oswestry	106	92	104	87	64	58	47	63	60
Shrewsbury	129	116	85	73	63	58	60	46	44
Wellington	109	84	98	69	47	58	31	56	39
Wem	94	103	73	55	77	49	34	64	0
Wenlock	102	93	81	67	57	58	51	75	108
Whitchurch	103	102	103	66	45	47	79	38	71
All Urban Districts	113	104	91	76	62	58	50	53	57
RURAL.									
Atcham	87	77	75	56	59	53	62	59	32
Bridgnorth	90	67	68	64	70	65	18	46	43
Burford	73	44	67	45	70	43	71	77	0
Chirbury	76	67	55	74	49	77	93	44	0
Church Stretton	94	97	58	77	65	61	63	151	45
Cleobury Mortimer	98	82	75	63	62	39	74	65	77
Clun	96	84	76	75	58	55	0	85	75
Drayton	122	86	77	71	67	69	39	122	49
Ellesmere	95	88	74	73	56	65	21	75	73
Ludlow	90	83	60	67	53	53	41	46	52
Newport	111	103	89	95	75	40	64	50	40
Oswestry	99	96	81	79	64	60	70	43	44
Shifnal	96	72	81	44	36	37	39	58	64
Teme	119	103	83	68	39	53	0	115	125
Wellington	97	88	94	61	61	53	56	96	45
Wem	73	69	70	55	73	54	77	40	65
Whitchurch	49	59	73	68	38	45	115	86	40
All Rural Districts	95	92	76	68	60	55	52	68	51

INFECTIOUS DISEASE.

Particulars of the cases of notifiable infectious disease are given in the table on page 17. As compared with the previous year the total number of notifications rose from 1,106 to 1,276. This is accounted for chiefly by the increase in notifications of *scarlet fever* from 255 to 422, although there was no very large outbreak of this disease in any particular area. Fortunately, the disease was of a mild type and gave rise to only one death.

There was a decline of 100 in the number of cases of *diphtheria*, but the disease assumed a rather virulent character in certain areas and gave rise to 13 deaths, 12 of which occurred in cases from rural districts.

Although the notifications of *pneumonia* increased from 195 to 292, this must be understood to indicate not a greatly increased prevalence of this disease, but better notification. In the past the notification of cases of pneumonia has been very poorly carried out, and in certain years has been less than the actual number of deaths.

There were six cases of *enteric*, the same number as in the previous year.

Puerperal Fever and *Puerperal Pyrexia* may be considered together as the line of cleavage is a very arbitrary one, and it is sometimes impossible to state into which of these categories certain cases should be placed. There were in all 70 cases, eight less than in the previous year. Certain of the cases of puerperal pyrexia, although coming within the legal definition of that condition, were suffering from infections which had no connection with the puerperal state further than that they happened to be associated with it.

Tuberculosis is dealt with elsewhere, but 147 cases of the respiratory form of the disease and 104 of other forms were notified, a fall of 16 cases and 4 cases respectively.

Return of Cases of Notifiable Infectious Diseases for the year 1933.

SANITARY DISTRICTS.	Population Census 1931	244,156	1	2	SCARLET FEVER.	DIPHTHERIA (including Membranous Croup).	ENTERIC (Typhoid and Paratyphoid Fever).	5	6	PNEUMONIA.	CEREBRO-SPINAL FEVER.	DYSENTERY.	MALARIA.	OPHTHALMIA NEONATORUM.	ERYSIPELAS.	TUBERCULOSIS.	15	16	OTHER FORMS							
																			RESPIRATORY	14	13	12	11	10	10	
RURAL.																				5	1	..	..	..	..	..
Atcham	..	22651	..	19	11	1	1	1	1	1	1	1	1	1	1	1	1	1	1	12	7	..	..	..	..	..
Bridgnorth	..	8293	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Burford	..	1159	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Chirbury	..	3059	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Church Stretton	..	4524	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Cleobury Mortimer	..	6925	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Clun	..	5945	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Drayton	..	7381	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Ellesmere	..	7324	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Ludlow	..	8677	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Newport	..	5498	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Oswestry	..	16603	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Shifnal	..	7707	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Teme	..	1563	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Wellington	..	11229	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Wem	..	8436	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Whitchurch	..	2091	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
URBAN.																				1	1	..	..	..	..	..
Bishop's Castle	..	1352	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Bridgnorth	..	5151	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Church Stretton	..	1704	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Dawley	..	7359	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Ellesmere	..	1872	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Ludlow	..	5642	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Market Drayton	..	4749	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Newport	..	3437	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Oakengates	..	11190	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Oswestry	..	9754	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Shrewsbury	..	32372	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Wellington	..	8186	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Wem	..	2157	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Wenlock	..	14149	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Whitchurch	..	6017	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
TOTAL FOR 1933	292	21	49	2	..	8	1
TOTAL FOR 1932	195	15	47	3	..	5	1

Closure of Schools.—During the year 33 schools were closed by the Local Education Authority to prevent the spread of infectious disease, and below are given particulars of school closures during the year :—

Measles	31
Diphtheria	2

In thirty instances attempts were made to prevent outbreaks of measles by closing the schools for about a week, six or seven days after the occurrence of the first case, with the following result :—

In 13 instances no further cases occurred. Closure in these cases must therefore be considered to have been without effect and, therefore, unnecessary.

In 10 instances cases occurred during closure, and further cases developed on re-opening. Closure again proved to be without effect.

In 2 instances no cases occurred during closure, but one or more cases developed on re-opening. Again closure did not justify itself as these bore no relationship to the first cases.

In 5 instances cases occurred during the closure, and did not attend school till free from infection. There was no further outbreak, and it is justifiable to conclude that closure was effective in checking the spread of the disease.

Reasons for Closure.—There is, of course, no justification on medical grounds for closing a school unless the spread of infection is thereby going to be prevented, and the School Medical Officer has no authority to advise closure on account of poor attendance, notwithstanding the fact that the number of children present in school is sometimes so low that there is little justification on educational grounds for keeping the school open.

Some authorities do not close schools at all on account of ordinary infectious disease, believing that outbreaks can better be controlled by keeping them open. Such an attitude can no doubt be justified when the area of a Local Education Authority happens to be a large town in which therefore it is possible for the School Medical Officer to keep schools where there is an outbreak of infectious disease under close, if not daily, supervision. It is not, however, entirely applicable to an area which is co-extensive with a large rural county, where long distances have to be travelled, and in which a school medical inspection may have to be carried out in a direction far removed from those schools in which infectious disease is present. In such circumstances closure not infrequently becomes advisable, although probably it is resorted to somewhat too frequently.

A Joint Memorandum issued by the Ministry of Health and the Board of Education states :—

“ While the power to close a school in the interests of public health must continue to rest both with the Sanitary Authority and with the Local Education Authority acting on the advice of their expert officers, it is a power which should be used with scrupulous care and caution. It may be safely laid down as a general principle that if the power to exclude individual children be used to the best advantage, it is only in special and quite exceptional cases that it will be necessary to close a school in the interests of public health.”

The infectious disease which most frequently gives rise to criticism of the attitude adopted by the School Medical Officer is measles. The control of this disease is made difficult by the fact that the period of greatest infectivity occurs during the three or four days which must elapse between the commencement of the illness and the appearance of the rash. During this stage of the illness the parent often regards his child as suffering from an ordinary cold, and allows him to go to school with disastrous results to the other children who have not had the disease. The procedure is also repeated by the infected children in one another's homes, in Sunday Schools and in places of entertainment. In a populous area therefore it is quite impossible to control an outbreak of measles by closure of the schools, which is the only ground on which the School Medical Officer has authority to advise it.

Dealing more specifically with measles, this Memorandum states :—

“ there is a general concensus of opinion that except in the case of scattered rural populations, it is useless as a means of checking the spread of the disease. As a rule, closure is deferred until a large proportion of the children are already absent, but even in those cases where early class closure has been attempted after the occurrence of a single case, experience appears to show that the only effect is to postpone and prolong the epidemic. It appears certain that in populous districts school closure for measles has but little value as a public health measure.”

Diphtheria Immunisation.—The Ministry of Health has issued a memorandum drawing attention to the advantages of *immunisation against diphtheria*, and outlining the procedure which should be adopted to secure active immunity in conformity with the findings of the Health Committee of the League of Nations. As the average period of hospital treatment is about six weeks, and the mortality is about 5 per cent., the memorandum suggests that immunisation of all children over one year of age should be offered to the parents, and that arrangements should be made to provide the necessary facilities. In residential homes and institutions for children immunisation of all inmates has very definite advantages.

No *immunisation against diphtheria* was carried out during the year, but this matter has received consideration by the Public Health Committee, and authority has been given to formulate a scheme offering immunisation to all children under 16 years of age, (the intention being to concentrate chiefly on children between the ages of five and ten years), and, as far as possible the procedure will be carried out in the various Welfare Centres. One must be prepared to find that, to begin with, the response will be small, and a great deal of educational and propaganda work will have to be done ; and, although no guarantee of absolute protection can be given, it is confidently expected that the value of immunisation will gradually become appreciated by the parents, and that they will be willing to take advantage of the facilities offered. To be successful, the scheme will require the cordial co-operation of the school teachers.

ISOLATION HOSPITAL ACCOMMODATION.

Section 63 of the Local Government Act, 1929, requires the County Council, as soon as may be, and within six months of being requested to do so by the Minister of Health, to prepare in consultation with the District Councils a scheme for securing adequate hospital accommodation for cases of infectious disease within the County.

This matter has been considered by the Public Health Committee on numerous occasions, representatives of the District Councils have been met, and a scheme has been formally approved by the Committee. It is now under consideration by the various District Councils, and, after their comments have been received, the scheme will be sent, subject to final approval by the County Council, with or without modification, for the approval of the Minister of Health.

In broad outline the proposals in the scheme are that the County Council should be responsible for making provision for all cases of small pox ; and that they should also be responsible for making provision for cases of infectious disease other than small-pox, with the exception of those occurring in the Borough of Shrewsbury and the Rural District of Atcham, as these Authorities have made satisfactory provision in the Monkmoor Isolation Hospital.

As regards *small-pox*, the intention is to provide one hospital with about six beds as a first line of defence, and two other hospitals with 8 and 16 beds respectively, which would normally be used for advanced cases of consumption.

For cases of infectious disease other than *small-pox* it is intended to provide a centrally situated hospital with about 64 beds and, in addition, to utilise the Morda Isolation Hospital at Oswestry, which has accommodation for about 17 patients. In the plan for the main hospital, provision would of course be made for extension in the event of additional accommodation being required.

The following is a summary of the isolation hospital accommodation at present available:—

For Small-pox,

<i>Hospital.</i>			<i>No. of Beds.</i>	<i>Provided by</i>
Prees Heath, Whitchurch	..	..	8	County Council.
Steeraway, Wellington	..	..	4	
Underdale, Shrewsbury	..	..	8	Borough of Shrewsbury.
Broseley	..	..	6	Borough of Wenlock.

For Infectious Diseases other than Small-pox.

Sanitary Districts (on 1st April, 1934).	Population	Provision of Hospital accommodation.	No. of beds (allowing 144 sq. ft. per bed) and nature of accommodation.
Shrewsbury Borough and Atcham R.D. ..	35518	Monkmoor Isolation Hospital, Shrewsbury.	40—Accommodation good.
Oswestry Borough and Oswestry R.D. ..	20881		
Oswestry and Chirk Isolation Hospital.†	10060		17*—Accommodation moderately satisfactory.
Market Drayton U.D. and Drayton R.D. ..	16470		
Little Drayton Joint Isolation Hospital.‡	4749		10*—Accommodation not good.
Market Drayton U.D. and Drayton R.D. ..	7873		
Bridgnorth Borough ..	5303	Bridgnorth Isolation Hospital	5*—Accommodation not good.
Ludlow Borough ..	5887	Ludlow Isolation Hospital.	9—Accommodation not good.
Newport U.D. .. and Newport R.D. ..	3437	Newport Isolation Hospital.	4*—Accommodation extremely
	5498	(A number of cases are also sent to Monkmoor Hospital, Shrewsbury).	unsatisfactory.
Bishop's Castle Borough ..	1352		
Church Stretton U.D. ..	2255		
Dawley U.D. ..	7629		
Ellesmere U.D. ..	1872		
Oakengates U.D. ..	11261		
Wellington U.D. ..	8500	No Hospital, but a number of	
Wem U.D. ...	2257	cases are sent to Monkmoor	
Wenlock Borough ..	14149	Isolation Hospital, Shrews-	
Whitchurch U.D. ..	6137	bury.	
Clun R.D. ..	10647		
Ellesmere R.D. ..	6757		
Ludlow R.D. ..	14453		
Shifnal R.D. ..	7602		
Wellington R.D. ..	10679		
Wem R.D. ...	10322		
Bridgnorth R.D. ..	12608	No provision whatever.	

* Slightly overestimated.

† Provides also for the Chirk R.D. of Denbighshire, which has a population of 4,599.

... Blore Heath R.D. of Staffordshire, which has a population of 2,283.

VACCINATION.

On page 22 are given particulars relating to vaccination for each vaccination district in the County for the years 1932 and 1933. It is not at present possible to give full details for 1933. In that year, however, there were 3,664 births and 1,582 declarations of conscientious objection ; and the total number of certificates of successful primary vaccination of children under 14 years received was 1,710.

In 1932, there were 3,749 births registered, 1,637 declarations of conscientious objection, and 1,593 certificates of successful primary vaccination.

It is suggested that a greater measure of protection would be secured if all element of compulsion were abolished and that instead, if the aims of vaccination were explained by a person acceptable in the home, such as a Health Visitor or District Nurse, vaccination would be accepted much more willingly, especially if it were done by the usual medical attendant, but that, as a measure of security, Local Authorities should have the power of compulsory vaccination in times of emergency.

The arrangements for administering the Vaccination Acts have been considered by the Public Health Committee with a view to correlating the duties of Vaccination Officers with the maternity and child welfare services and to simplifying eventually the existing administration.

It is proposed that, as each post of Vaccination Officer falls vacant, the vacancy should be filled by the chief clerk of the County Health Offices, thus ultimately making him Vaccination Officer for the whole county.

Vaccination of Infants and Children.

VACCINATION OF INFANTS IN 1932.

VACCINATION OF CHILDREN
UNDER 14
DURING 1933.

Vaccination Districts.	Births registered	Success-fully Vaccinated.	Insus-ceptible of Vac-cination.	Declar-a-tions of Conscien-tions Ob-jections.	Died Unvac-cinated.	Vaccina-tion post-ponned.	Removed out of District.	Unac-counted for.	Total No. of Certificates of successful Primary Vaccination received.	No. of Statutory Declarations of Conscientious Objection actually received.
									94	
Bridgnorth	214	88	..	108	4	1	4	9	102	12
Church Stretton	67	44	..	12	8	2	1	..	56	46
Cleobury Mortimer	98	42	..	49	5	1	1	0	54	60
Clun	177	90	1	67	10	2	2	5	74	52
Drayton	..	113	..	45	7	1	3	0	122	27
Ellesmere	..	92	..	45	12	1	0	14	113	96
Ludlow	..	97	..	95	3	1	2	2	116	190
Madeley	..	99	..	190	17	1	2	2	111	41
Newport	..	66	..	68	3	1	2	4	48	231
Oswestry	..	67	..	201	13	..	4	7	67	66
Shifnal	..	44	..	70	..	..	..	..	46	63
Shrewsbury	..	517	3	317	51	3	..	24	45	311
Wellington	..	112	..	265	17	..	1	1	5	252
Wem	..	71	1	51	3	1	1	..	77	39
Whitchurch	..	51	1	54	3	..	3	1	61	60
	3749	1593	6	1637	156	29	74	254	1710	1582
Percentage of Total No. of births for the year										
1932	42.49	.16		43.7	4.16					6.77
1931	45.07	.10		42.39	4.23					5.38
1930	46.83	.2		42.4	4.54					3.93
1929	46.81	.22		41.21	4.84					5.08

LEGISLATION IN FORCE.

In addition to the Acts and Bye-Laws in force in the various districts of the County, the County Council has acquired powers under the "County of Bedford, etc. (Prevention of Tuberculosis) Order, 1926," and the "County of Salop (Prevention and Treatment of Small-pox) Regulations, 1920."

LOCAL GOVERNMENT ACT, 1929.

While a great deal of consideration has been given to matters which will have to be dealt with under the various sections of the Local Government Act, 1929, the appropriation of Berrington Hospital referred to below is the most important alteration which has been made in the administration of the health services since the duties of the Boards of Guardians were taken over by the County Councils.

Poor Law Medical Out-relief.—The administration of Poor-Law Out-Relief has continued along the lines followed previous to the transfer of these services to the County Council.

Classification of Institutions.—The question of classification of Public Assistance Institutions has been very carefully gone into and a scheme has been provisionally approved by the Institutions (Classification) Committee, although it is subject to modification on further consideration. The classification provides, amongst other things, for all cases in need of skilled nursing, to be sent to the County Council Hospital, and for the concentration of the chronic sick in certain of the Public Assistance Institutions which would seem to be the most suitable for the purpose, and steps are at present being taken for the adaptation of the Ironbridge Institution for chronic sick cases not in need of skilled nursing.

Appropriation.—Under Section 5 of the Act, a resolution was passed by the County Council appropriating Berrington Hospital as a general hospital for the purpose of the reception and treatment of the sick (destitute or otherwise). The appropriation was to have taken place on 1st October, 1933, but, owing to certain works of adaptation not having been completed, it was deferred until 1st January, 1934, since when the Public Health Committee has been responsible for the administration of the hospital. From the time of appropriation, the institution ceased to be known as "Berrington Hospital," and has been re-named "The County Council Hospital."

The position is, however, complicated by the presence of casual wards at this institution, and under Section 6 of the Act their management and administration have been delegated to the Public Health Committee, subject to the general direction and control of the Public Assistance Committee. The latter Committee has already taken steps to provide new casual wards to the north of Shrewsbury, and it is expected that, by about the end of the current year, the casuals for whom it is at present necessary to find accommodation at the Hospital will have been provided for elsewhere.

Consultation with Voluntary Hospitals.—Under Section 13 of the Act, a meeting with the Committee representative of the Voluntary Hospitals in this County took place on 8th April, 1933, in order to consider the County Council proposals with regard to the provision of another forty beds at the County Council Hospital. These proposals met with the general approval of this Committee, since when it has not been necessary to call another meeting.

Delegation.—Under Section 6 of the Act, the functions relating to the domiciliary relief of the Blind which had been carried out in the past by the Guardians were delegated on 1st April, 1930, to the Public Health and Housing Committee, subject to the general direction and control of the Public Assistance Committee. The delegation of the duties to the Public Health Committee in connection with the casual wards at the County Council Hospital has already been referred to.

Water Supplies, &c.—Several applications under Section 57 have been received from District Councils for assistance towards the provision of water supplies, but so far no such assistance has been given under this Section. A grant of £15 12s. 6d. per annum for thirty years, the period of the loan, has, however, been *promised* in order to assist in the provision of a satisfactory water supply for the village of Bucknell, subject to the proposed scheme of water supply receiving the approval of the Minister of Health.

The scheme which was got out defining the conditions to be complied with by District Councils making application for assistance in the provision of water supplies was re-considered and revised during 1934 by the Public Health Committee. Full particulars of the scheme are set out in the section of this Report which deals specially with Water Supplies (see page 59).

No applications have been received from District Councils for assistance in the provision of works of sewage disposal.

Whole-time Medical Officers of Health.—A scheme under Section 58 has been formulated for securing the appointment of whole-time Medical Officers of Health for county districts, and has received the general approval of the Public Health Committee. The matter has been referred to the Sub-Committee, who will ascertain the views of the District Councils and will modify the scheme, if found necessary, before it is again referred to the full Committee with a view to its final submission for the approval of the Council.

Isolation Hospital Accommodation.—The County Council's scheme under Section 63 of the Act has already been dealt with on page 19.

MATERNITY AND CHILD WELFARE.

(1) **Notification of Births.**—Births, with the exception of those occurring in the Borough of Shrewsbury, must be notified to the County Medical Officer of Health by the midwife, doctor in attendance at the confinement, or other responsible person. The following are the particulars :

Live Births :—		1930	1931	1932	1933
Total registered births	.. .. ..	3,557	3,451	3,293	3,166
Notifications by midwives	.. .. ..	3,014	2,850	2,770	2,766
" by medical practitioners	.. .. ..	435	422	405	327
" by parents	.. .. ..	9	2	1	2
Otherwise discovered	.. .. ..	46	53	45	50
Excess of births registered over births notified or discovered	.. .. ..	53	124	72	21

During the year 145 stillbirths were registered and 135 were notified—89 by midwives, 29 by medical practitioners, and 17 were otherwise discovered.

In the Borough of Shrewsbury, which is an independent Maternity and Child Welfare Authority, 498 live births and 18 still-births were registered during the year.

(2) **Medical, Health Visiting and Nursing Services.**—The Assistant School Medical Officers are also the Medical Officers for Maternity and Child Welfare Work, to which they devote three-tenths of their time.

There are twelve whole-time health visitors whose work includes attendance at child welfare centres, ophthalmia neonatorum nursing, tuberculosis visiting and attendance at tuberculosis dispensaries, measles visiting, supervision of mental defectives and also duties as Infant Pro-

tection Visitors. Ten of the whole-time health visitors are also engaged in school work and attend school medical inspections, school clinics, eye clinics, and visit physically defective school children. In addition, 70 district nurses are also part-time health visitors.

Visits paid by Health Visitors.

Visits in 1933—	To children.				To expectant mothers.
	Under 1 year.		1 to 5 years.	Total	
	1st	Total.			
Whole-time (12) ..	1,889	10,817	13,823	24,640	761
Part-time (70) ..	1,210	9,965	13,810	23,775	6,227
Visits in 1928 ..	3,681	20,654	26,701	47,355	5,445
Visits in 1929 ..	3,400	20,229	25,625	45,854	5,784
Visits in 1930 ..	3,628	22,424	26,655	49,079	6,271
Visits in 1931 ..	3,538	22,328	27,642	49,970	6,545
Visits in 1932 ..	3,293	21,850	29,176	51,026	6,885
Visits in 1933 ..	3,099	20,782	27,633	48,415	6,988

It is satisfactory to note that there is an upward tendency in the number of visits made by health visitors to expectant mothers, a branch of the work which is capable of much further development.

Insanitary Conditions.—Particulars of the following insanitary conditions reported on by the health visitors were forwarded to the Sanitary Authorities for their attention, viz., unsatisfactory water supplies 32, inadequate ventilation 58, uncleanliness 71, dampness 63, overcrowding 117, and nuisances 22.

Measles Visiting.—Infants suffering from measles are visited by the whole-time health visitors. During the year 178 cases were visited. In 75 of these cases no doctor was in attendance, and in 28 of them medical attention was advised.

Dental Treatment.—Nursing and expectant mothers who are not in a position to pay for private treatment receive treatment by arrangement with the School Dental Officers at the Welfare Centres, and 137 such patients—twelve less than in the previous year—were treated.

Children under school age receive treatment by the Dental Officers under a similar arrangement. Forty-three children were treated,—19 more than in the previous year.

Orthopaedic Cases.—See under Orthopaedic Section, page 33.

(3) **Maternity and Child Welfare Centres.**—There are now fourteen Welfare Centres in the County, nine of which are held weekly, those at Church Stretton, Ellesmere, Newport, Highley, and Wem being held fortnightly.

At most of the Centres a school clinic is held in the morning, the latter part of the day being devoted to maternity and child welfare work. There are no clinics for ante-natal cases only, and this work is done in conjunction with the child welfare work. An effort is made, as a rule, to do the ante-natal work during those parts of the day when the Centres are least busy, and cases which attend for re-examination are usually requested to be present at certain specified times. Ante-natal cases coming from a distance, however, and also fresh cases, are seen at such times as they find it possible to attend.

Attendances at Maternity and Child Welfare Centres in 1932 and 1933.

WELFARE CENTRES.	CHILDREN.												EXPECTANT MOTHERS.					
	Under 1 year.						Between 1 and 5 years.						New Cases.			Total Cases.		
	New Cases.		Total Cases.		Total Attendances.		New Cases.		Total Cases.		Total Attendances.		New Cases.		Total Cases.		Total Attendances.	
	1933	1932	1933	1932	1933	1932	1933	1932	1933	1932	1933	1932	1933	1932	1933	1932	1933	1932
Bridgnorth ..	103	100	160	131	1354	1184	41	32	190	175	2762	2620	73	80	76	120	163	164
Church Stretton ..	18	16	34	33	154	136	4	4	60	48	563	477	8	2	10	10	28	26
Dawley ..	88	101	117	156	1313	1472	26	19	151	152	2488	3541	44	48	48	54	134	142
Ellesmere ..	50	60	115	112	594	515	19	9	65	60	530	675	37	37	43	53	98	102
Highley ..	33	34	51	58	343	286	6	6	49	43	194	377	4	4	5	5	11	14
Ironbridge ..	103	110	152	149	1534	1209	38	29	210	158	1665	1895	34	43	36	48	73	87
Ludlow ..	65	75	85	131	929	1042	34	53	507	329	1569	1706	25	27	36	30	99	99
Market Drayton ..	82	95	116	126	812	991	40	57	223	222	2124	2654	70	40	75	58	192	126
Newport ..	81	73	137	110	485	343	25	27	238	124	622	419	48	64	50	70	102	116
Oakengates ..	120	119	167	151	1195	1222	32	53	160	255	1293	1150	40	41	50	51	158	172
Oswestry ..	182	207	389	448	1952	1959	50	43	287	267	1477	1879	47	27	55	30	88	72
Wellington ..	133	146	152	239	1185	1475	53	78	185	194	1724	2408	71	67	81	70	199	163
Wem ..	51	..	51	..	209	..	47	..	47	..	146	..	17	..	17	..	30	..
Whitchurch ..	93	100	147	147	1089	1110	17	26	207	162	1333	1445	28	29	30	32	82	96
Totals ..	1202	1236	1873	1991	13148	12944	432	436	2579	2189	18490	21246	546	509	612	631	1457	1379

Under an arrangement with the Borough of Shrewsbury, by which the County Council makes a small payment per case attending the Shrewsbury Welfare Centre or Ante-natal Clinic, 42 expectant mothers made 52 attendances, and 48 children under five years of age made 223 attendances. This arrangement proves very helpful with County Council cases resident near Shrewsbury who are not, therefore, as conveniently situated to any other Welfare Centre.

Addresses at Welfare Centres.—When time and opportunity allow, addresses on subjects of importance to health are given at the Welfare Centres by doctors, health visitors, dentists, and voluntary workers.

The following are the particulars for the years 1928, 1929, 1930, 1931, 1932 and 1933:—

Welfare Centres.	No. of Addresses.					
	1928	1929	1930	1931	1932	1933
Bridgnorth ..	17	19	15	10	17	33
Church Stretton ..	4	5	5	6	4	5
Dawley ..	42	45	39	45	47	48
Ellesmere ..	0	0	0	0	1	0
Highley ..	3	0	4	21	22	19
Ironbridge ..	28	22	8	15	27	47
Ludlow ..	23	1	0	0	27	37
Market Drayton ..	45	51	48	48	52	51
Newport ..	0	0	3	0	3	8
Oakengates ..	40	35	36	33	37	31
Oswestry ..	0	6	9	5	10	11
Wellington ..	50	48	43	48	52	50
Wem ..	0	0	0	0	0	6
Whitchurch ..	26	25	21	16	12	23
Totals ..	278	257	231	247	311	369

(4) **Feeding of Infants.**—The first visit of the health visitor to an infant is paid as soon as possible after the midwife has ceased attendance on the mother. It was found in 1933 that 88.8 per cent. of the infants were breast-fed, 8.7 per cent. were artificially fed, and that 2.5 per cent. were on mixed feeding on the first visit. Mixed feeding usually proves to be the initial step towards putting an infant entirely on the bottle, although in a very small percentage of cases it is possible entirely to eliminate later the artificial part of the feed.

There has been little or no improvement in this respect over the last ten years, the proportion of naturally fed infants being in each of these years between 88 and 90 per cent. on the first visit of the health visitor. The mischief has in these cases been done by the time the health visitor has paid her first visit.

The percentage of infants maintained on natural feeding is an important indication of the efficiency of the health visiting services, and the following are the figures for the last four years :—

		1930	1931	1932	1933
Percentage naturally fed at	first visit ..	89.7	89.2	88.2	88.8
	three months ..	58.9	73.5	74.7	72.4
	six months ..	38.5	65.4	66.1	63.2

It is a rule of the Central Midwives Board that "a midwife must forthwith notify the Local Supervising Authority of each case in which it is intended to substitute artificial for breast feeding." During the year 39 such notifications were received, as opposed to 35 in 1932. Among the reasons given were :—

Inability to breast feed ..	..	..	..	..	14
Refusal to breast feed ..	..	..	..	..	7
Poor health of mother (advice of doctor) ..	..	..	..	..	12

The great reduction in infant mortality which has taken place in the past thirty years has been due chiefly to a greater appreciation of the physiological requirements of the newly-born child, especially with regard to feeding. Nothing is more likely to affect adversely its future well-being than the initiation of artificial methods of feeding immediately or soon after birth, and the great importance of care in the early weeks and months of life is brought out by the following table which gives particulars of the ages at death of 1,055 children under twelve months, concerning which accurate information is available :—

Deaths of Infants under one year.

AGE	Number of Deaths.						1928—1933	
	1928	1929	1930	1931	1932	1933	Total.	Percentage.
Under 1 day	30	42	28	40	37	38	215	20.4
1 day—1 week	35	52	49	28	41	48	253	24.0
1 week—1 month	45	37	35	20	28	26	191	18.1
1 month—3 months	22	26	19	21	30	15	133	12.6
3 months—6 months	18	23	13	17	18	9	98	9.3
6 months—9 months	20	22	12	14	11	11	90	8.5
9 months—12 months	12	18	11	14	12	8	75	7.1
TOTAL DEATHS	182	220	167	154	177	155	1055	100.0

(5) **Ophthalmia Neonatorum.**—Reluctance on the part of the parents to consent to hospital treatment, on account of what appears to them to be a comparatively trivial condition, is understandable enough ; but an effort is made to get all cases of ophthalmia neonatorum removed to hospital because of the seriousness of the consequences of neglect, which might quite easily amount to actual and complete blindness. During the year 38 cases of ophthalmia neonatorum were notified, all of which recovered with apparently no injury to the eyesight.

(6) **County Home for Ailing Babies.**—The County Council works through a local committee which includes representatives from the Public Health Committee. A complete financial statement is furnished monthly to the County Council.

The Home is chiefly intended for babies under one year of age who are obviously suffering from malnutrition due to one cause or another. Infants of mothers suffering from tuberculosis in a highly infectious state, however, are now admitted to the Home, with the object of getting immediate removal from the source of infection and afterwards, if possible, of arranging for some means of boarding the children away from their mothers. This matter is the subject of special comment in that part of the report which deals with the work under the Tuberculosis Scheme (see page 40).

The number of babies admitted to the Home was 83 (4 more than in the previous year), and the average duration of stay was 60 days (4.2 less than in the previous year).

Dr. S. S. Proctor, Medical Officer of the Home, states in his Annual Report :—

“ Four cases of infectious diseases have to be recorded. Two of these (twins) were of German Measles who had been infected prior to admission. That no other baby developed the disease bears witness to the efficacy of open-air regime in avoiding spread of infection. The case of generalised tuberculosis had been with the infective mother for a few days after birth. This shows the supreme importance of removing these babies at birth from a parent with active pulmonary tuberculosis.

“ Twelve deaths occurred during the year, the causes being :—

Marasmus	3	Icterus Neonatorum	1
Pyloric stenosis	1	Congenital heart disease	1
Meningitis	1	Ideopathic convulsions	2
Spina Bifida	1	Prematurity and pyloric spasm ..	1
Acute miliary tuberculosis ..	1		

“ The death-rate has been high, but a glance at the causes of death will show that in at least half of the fatalities no other result could well have been expected.”

The reasons for admission to the Home were as follows :—

Malnutrition	43	Prematurity	7
Improper feeding	9	Tuberculosis Contacts	6
Marasmus	9	To restore breast feeding	5
Jaundice	1	Congenital heart disease	1
Spina Bifida	1	Difficulty in feeding	1

Of those discharged, 65 were in good health, 2 had improved, and in 2 cases there was no improvement.

(7) **Supply of Free Milk.**—Milk is supplied free in necessitous cases and, before the necessary order is given, each case is carefully inquired into by the Medical Officer of the Centre and one of the lady helpers ; or where there is no Centre, by the health visitor and a local responsible person. The opinion of the Relieving Officer is obtained in all cases, and all the reports are

carefully scrutinised at the central office. Although the sum of £1,538 was spent on free milk in the year ended March, 1934, it must be recognised that this is undoubtedly preventive work of great value because, if a considerable proportion of the poorer people go short of important articles of diet, as seems probable, the provision of milk should greatly improve the health of the children, lessen the amount of rickets, and diminish the number and severity of infectious illnesses which are so frequently associated with this condition.

(8) **Infant Life Protection.**—By the passing of the Children and Young Persons Act, 1932, which came into force on 1st January, 1933, the powers and duties under the Act of 1908 have been enlarged. Under the new Act, not only has the age requiring notice of intention to receive a child been raised from seven to nine years, but such notice must be given not less than seven days before the child is received.

Infant Life Protection cases are put under the supervision of the whole-time Health Visitors, who are required to visit them at least once a quarter, or more frequently should the home conditions or health of the child not be found satisfactory. All unsatisfactory conditions, which the foster-parent cannot or will not remedy on the advice of the Infant Protection Visitor, are immediately reported and the necessary action taken. The mother of the child (if her address is known) is immediately communicated with and as a rule given an opportunity, if the case is not urgent, either to receive the child herself or to have him put under the care of another and more suitable foster-parent; but, should she be unable or unwilling to do so, steps are immediately taken to secure his removal to a place of safety, which in these cases means a Public Assistance Institution.

Number of cases on 1st January, 1933	..	..	..	..	146
Number of cases added during the year	..	..	..	..	71
				—	217
Number of cases	{	reached nine years of age	..	..	7
		legally adopted	..	..	4
		left County	..	..	13
		removed to relatives	..	..	13
		died	..	..	0
		removed to Public Assistance Institutions		..	3
				—	40
Number of cases under supervision on the 31st December, 1933				—	177

As regards the three cases removed to Public Assistance Institutions, one was admitted on the advice of one of the Assistant School Medical Officers for medical treatment, one was admitted on the application of the mother, and one was removed under a Justices' Order because of the unsuitability and ill-health of the foster-mother.

The increase in the number of Infant Life Protection cases is largely, if not entirely, accounted for by the raising of the age limit from 7 to 9 years. It will be observed from the above table that at the beginning of the year there were 146 cases under supervision, and that at the end of the year these had increased to 177.

(9) **Midwifery Services.**—In 1932, there were 258 midwives practising in the County, 5 of whom were untrained. In the year under consideration, of the 246 registered midwives engaged in midwifery practice in Shropshire, the same number, 5, were untrained.

Under the Maternity and Child Welfare Act, 1918, the duty is placed on the County Council of making provision for midwifery services, and its obligation in this respect it discharges through the agency of the Shropshire Nursing Federation and the affiliated District Nursing Associations. There were 101 District Nursing Associations in being during 1933, the same number as in the previous year.

Training of Midwives.—By an arrangement with the County Council, the Shropshire Nursing Federation sends suitable candidates for training as midwives, three-fourths of the expense being borne by the County Council, the remainder being met by the Shropshire Nursing Federation. The number of midwives sent for training under the arrangement since 1921 is as follows :

1921	14	1927	11 (1 did not complete training).
1922	13	1928	10
1923	14	1929	9
1924	4	1930	9 (1 did not complete training).
1925	8 (2 did not complete training).	1931	10 (2 did not complete training).
1926	3	1932	9 (1 did not complete training).
		1933	6

Medical Help sought by Midwives.—There was a slight increase in the number of cases for which medical help was sought by midwives. An analysis of the reasons for sending for medical help is given in the following statement :—

		1930	1931	1932	1933
On account of a complication of pregnancy ..	..	221	236	254	275
„ „ „ „ „ labour ..	..	733	784	719	661
„ „ „ „ „ the puerperium ..	..	68	62	72	84
„ „ of the health of the child ..	..	170	157	155	191
		—	—	—	—
		1192	1239	1200	1211
		—	—	—	—

Payments under Midwives Act.—The number of claims for payment under the Midwives Acts sent in by medical practitioners was 762, and payments amounting to £1,226 were made to them. In the previous year, the number of claims for payment was 722, and the amount paid was £1,234. It will be noticed that, although the number of claims made in 1933 was slightly greater than in the previous year, the amount paid was slightly less.

Still-births.—Notifications of 41 still-births were received from midwives. Seventeen births were at full term and twenty-four were premature. The sex of two children was not stated, but of the others 16 were males and 23 females.

Statistics relating to Work under Midwives Acts.

Year	Midwives practising in December.	Visits of Inspection.	Medical help.	Still-birth.	Notification of			
					Death of mother or child, no doctor in attendance.	Artificial Feeding	Liability to be a source of infection.	Having laid out Dead Body.
1925	261	694	882	48	3	51	28	22
1926	249	846	895	52	5	46	25	42
1927	260	854	898	55	3	36	37	28
1928	267	847	1056	50	2	44	32	32
1929	273	796	1066	41	4	38	45	38
1930	263	845	1192	57	8	47	59	38
1931	257	780	1239	35	4	49	57	35
1932	258	774	1200	47	2	35	70	49
1933	246	756	1211	41	0	39	93	64

(10) **Maternal Deaths.**—Every maternal death is now the subject of careful investigation by Dr. Weston, and a report is sent to the Ministry of Health for submission to the Maternal Mortality Committee which has been set up to enquire into this problem.

In 1933 there were in Shropshire 22 maternal deaths directly or indirectly due to pregnancy, or due to a condition complicated by pregnancy. In 9 of these cases a doctor had been engaged prior to the confinement.

The following table gives particulars relating to maternal deaths in this County since 1928, and it will be observed that no fewer than 61 deaths out of a total of 123 were the result of a first pregnancy. This fact brings out the great importance of attendance to the health and general well-being of the mother who is approaching her first confinement, and also to the need for skilled nursing and skilled medical attendance at the time it takes place. *The factors, therefore, which bring about maternal deaths as a result of the first pregnancy would appear to epitomise the causes of the maintenance of the maternal death-rate.*

Maternal Deaths 1928 to 1933.

Year	Causes of Death.				Number in first confinement.	Death-rate per 1,000 live births.	
	All causes.	Puerperal Fever.	Puerperal Pyrexia.	Other.		Shropshire.	England and Wales.
1928 ..	17	2	4	11	11	4.76	4.42
1929 ..	24	4	4	16	8	6.73	4.33
1930 ..	21	4	4	13	11	5.91	4.40
1931 ..	21	5	5	11	12	6.09	4.11
1932 ..	18	9	2	7	6	5.47	4.24
1933 ..	22	7	1	14	13	6.00	4.42
	123	31	20	72	61	5.82	4.32

(11) **Puerperal Fever and Puerperal Pyrexia.**—There were 19 cases of puerperal fever and 49 cases of puerperal pyrexia during the year. Arrangements have been made for the admission of these cases to the County Council Hospital; or if the medical practitioner in attendance so desires, a nurse is provided through the agency of the Shropshire Nursing Federation to look after the patient in her own home. Twelve cases of puerperal fever were admitted to Hospital, of whom 7 recovered and 5 died. Of the 12 cases of puerperal pyrexia similarly dealt with, 11 recovered and 1 died.

(12) **Pemphigus.**—A small outbreak of Pemphigus occurred during the year, and five cases in all developed. The difficulty in eliminating infection when an outbreak occurs sometimes results in a large number of cases. As this condition sometimes is a very serious one, it is very satisfactory to report that there were no deaths.

(13) **Obstetrical Consultant and Consultant under the Puerperal Fever and Puerperal Pyrexia Regulations.**—Dr. Downer's services are now available for any doctor who desires a second opinion or assistance as a result of a serious complication or emergency arising during pregnancy, parturition, or the puerperium.

During the year Dr. Downer's services were taken advantage of in his capacity of Consultant in 10 cases, namely, 2 ante-natal cases, 2 confinement cases, and 6 cases of puerperal fever or puerperal pyrexia.

(14) **Provision of Maternity Beds.**—The following are the arrangements made for the provision of maternity beds by the County Council:—

Berrington Hospital.—The number of cases admitted during the year was 82 (17 infectious cases with an average length of stay of 19.6 days, and 65 ordinary cases with an average stay of 19.2 days).

Newport Nursing Home.—Two beds are always available here. The County Council pays an annual fee of £10 per bed towards their maintenance. During the year 7 County Council cases were admitted, the average stay being 10.4 days.

The Lady Forester Hospitals, Broseley and Much Wenlock.—There are six maternity beds at Broseley hospital and four beds at Much Wenlock hospital. Occasionally other beds have been used. The County Council has agreed to pay £1 1s. a week towards the cost of any case recommended that cannot afford the fee.

Hostels for unmarried mothers and their infants.—An arrangement is in force with the Mrs. Legge Memorial Home, Wolverhampton, by which patients are admitted for six months, the County Council paying £2 a week for the first six weeks, the expense of the remainder of the period being borne by the Home, but no cases were sent during the year.

Institutional Treatment of expectant and nursing mothers and their infants suffering from Venereal Diseases is carried out under the Venereal Diseases Scheme at Cleveland House, Wolverhampton. Five mothers were sent during the year (see page 51).

MATERNITY AND NURSING HOMES.

Registration.—Any person carrying on a nursing home within the meaning of the Act without having had it duly registered is liable to a penalty, and application for registration must be made to the Local Supervising Authority, namely, the County Council, on a prescribed form accompanied by a fee of 5/-. The Local Supervising Authority has power to grant exemption from registration in certain cases, and registration has not been insisted upon in the case of the following Institutions:—

- Eye, Ear and Throat Hospital, Shrewsbury.
- King Edward VII. Memorial Sanatorium, Shirlett.
- Lady Forester Hospitals, Broseley and Much Wenlock.
- Robert Jones and Agnes Hunt Orthopaedic Hospital, Oswestry.
- Royal Salop Infirmary, Shrewsbury.

Inspection.—The Inspector of Midwives is also the Inspector of Nursing Homes, and she submits a report on each Home once a quarter or more frequently should this be deemed necessary. She is also required to inspect and report fully upon any Nursing Home in respect of which an application has been made for registration.

During the year two applications for registration were received. Both were refused, one because of lack of staff with the necessary nursing qualifications, and the other on account of the unsuitability of the premises. No appeals against the refusals to grant registration were made in these cases.

Accommodation provided.—During the year, two registered nursing homes were voluntarily closed, and on 31st December, 1933, the position was as follows :—

No. of Homes taking <i>general</i> cases only	..	..	..	..	..	7
Patient accommodation :—	76	beds and 4 cots.				
No. of Homes taking <i>maternity</i> cases only	..	..	..	..	..	8
Patient accommodation :—	12	beds.				
No. of Homes taking both <i>maternity</i> and <i>general</i> cases	..	..	..	..	..	19
Patient accommodation :—	167	beds and 6 cots.				

In all, therefore, 34 Homes have been registered, the total patient accommodation provided being 255 beds and 10 cots.

ORTHOPAEDIC SCHEME.

There is a central hospital at Park Hall, Oswestry, and after-care clinics are held at Bridgnorth, Cleobury Mortimer, Craven Arms, Dawley, Ellesmere, Ironbridge, Ludlow, Market Drayton, Newport, Oakengates, Oswestry, Shifnal, Shrewsbury, Wellington, Wem, Whitchurch.

The Orthopaedic Centres are visited at regular intervals by a Medical Officer of the Hospital, and ten of the centres are visited weekly by specially trained nurses, the remainder being visited fortnightly. All the Orthopaedic Centres, except those at Ellesmere and Wem, are held on the same day as the Child Welfare Centres, an arrangement which makes for that co-operation between the two branches of the work which is so essential, as the early discovery of orthopaedic conditions in children under five depends almost entirely on the health visitors. The early discovery of cases amongst school children is largely in the hands of the School Medical Inspectors, who are also the Medical Officers in attendance at the Child Welfare Centres. By these means the Orthopaedic work is closely linked up with the School and Child Welfare work.

Tuberculosis.—In the case of lesions due to tuberculosis there is frequently delay on account of the insidious nature of the disease and the failure of the patients to recognise the seriousness of the comparatively mild symptoms which manifest themselves at its commencement. Many of the tuberculous cases, therefore, come under notice only after considerable damage has been done. The opinion of an orthopaedic surgeon, who has X-rays and every facility for diagnosis at his disposal, can be obtained at the Orthopaedic Hospital.

Acute Poliomyelitis.—A memorandum has been issued by the Ministry of Health on the present practice in the diagnosis and treatment of acute poliomyelitis, popularly known as "infantile paralysis." Although acute poliomyelitis is a notifiable disease, the number of notifications gives but slight indication of its prevalence, as it may manifest itself in varying degrees of severity, certain cases showing symptoms merely of a feverish cold, while others manifest profound and extreme forms of paralysis, resulting in crippling and sometimes in a mortality of from 10 to 25 per cent. Most of the notifications, therefore, relate to serious cases with unfortunate terminal results.

The after effects of the crippling forms of the disease being so far-reaching, the object of the memorandum is to emphasise the importance of early diagnosis that preventive treatment may be obtained at the earliest possible moment, and also to ensure that adequate measures may be undertaken to prevent the spread of infection. The value of human "convalescent serum" is discussed and, while the results of its study are inconclusive, and it is as yet impossible accurately to appraise its real value in the treatment of cases of this disease, its use as a remedy is encouraged and the methods by which it should be given are outlined.

The importance of early treatment of poliomyelitis is so great that arrangements have been made with the Orthopaedic Hospital for a specially trained nurse to be sent to help the medical practitioner, and afterwards to get the patient to hospital if necessary.

Attendances at Clinics.—The following table gives particulars of the attendances at the Orthopaedic Clinics during 1933. It will be observed that the great preponderance of cases are children between the ages of 5 and 16 years, who have been found to be in need of treatment as a result of school medical inspection. The tuberculous cases, which cover all ages, are the smallest in number, but their attendance at the clinics as a rule extends over a very prolonged period, although frequency of attendance is not perhaps so necessary as in many of the other cases.

Attendances at Orthopaedic After-Care Clinics, 1933.

Age Groups.	No. of Cases.				Total No. of Attendances	Condition on discharge or other particulars.						
	On 1st Jan., 1933.	Admitted during 1933.	Discharged. 1933.	On 31st Dec., 1933.		Rem- edied.	Im- proved	Unal- tered.	Dead.	Left Coun- ty.	Re- fused to attend	Treat- ed else- where.
Under 5 years ...	175	151	105	221	1,419	29	2	..	1	4	64	5
5—16 years ...	667	302	327	642	6,037	108	31	1	4	13	152	18
Over 16 years ...	386	233	258	361	2,337	46	96	2	4	28	67	15
T.B. cases of all ages ...	134	19	27	126	955	5	9	..	2	6	4	1
Totals ...	1,362	705	717	1,350	10,748	188	138	3	11	51	287	39

717

Cases admitted to Hospital.—Conditions and defects of such a nature that they cannot be adequately dealt with at the After-Care Centres, are admitted for treatment to the Orthopaedic Hospital, particulars of which are given below. *The total of all classes of cases admitted* to the Orthopaedic Hospital was 154, as opposed to 113 cases during the previous twelve months. The average number of beds occupied was 40, an increase of 2 on the previous year.

Tuberculous Cases.—The number of tuberculous cases admitted was 59, an increase of 6 on the previous year. Of the cases dealt with under this Scheme, 26 were diagnosed as suffering from affections of the spine, 17 of the hip, and 16 from affections of the other bones and joints.

Cases treated at the Robert Jones and Agnes Hunt Orthopaedic Hospital during the year and paid for by the Public Health and Education Committees.

Disease.	Ages of Patients.			Total cases.	Per- centages.
	Under 5 years of age.	5—16 years of age.	Over 16 years of age.		
Tuberculosis of Bones and Joints ..	5	21*	33	59	38.31
Fractures and Dislocations ..	1	16	..	17	11.04
Diseases and Injuries of the Nerves ..	3	12	..	15	9.74
Osteomyelitis .. .. ..	..	9	..	9	5.84
Congenital Deformities ..	..	4	..	9	5.84
Claw Foot .. .. ..	..	..	8	..	5.19
Flat Foot .. .. ..	..	..	7	..	4.55
Spinal Curvature—Non-tubercular ..	..	6	..	6	3.90
Arthritis (Septic and Rheumatoid) ..	..	6	..	6	3.90
Rickets	3	2	..	5	3.25
Conditions due to faulty footwear ..	..	..	5	..	3.25
Club Foot	2	2	..	4	2.60
Diseases of the Hip—Non-tubercular ..	1	1	..	2	1.30
Torticollis .. .. ..	..	1	..	1	.65
Injuries to hands .. .. ..	..	..	1	..	.65
Total for 1933 ..	19	102	33	154	
Total for 1932 ..	18	69	26	113	

* Includes 6 Shrewsbury Borough School Children.

The following table shows the apportionment of the cases treated in the Orthopaedic Hospital and the average number of beds occupied by each class of case in each year since 1921 :—

Cases Treated and Average Number of Beds occupied in Robert Jones and Agnes Hunt Orthopaedic Hospital.

	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933
Tuberculosis { Cases treated	99	91	95	96	75	71	92	87	75	73	71	53	59
Av. No. of beds	44	42	37	40	37	31	40	39	30	23	31	27	27
Med. Inspec. { Cases treated	95	47	56	70	70	72	71	61	59	83	67	48	81
Av. No. of beds	21	11	11	13	14	15	15	14	8	13	11	8	10
Child Welfare { Cases treated	38	34	31	25	33	21	22	20	22	21	14	12	14
Av. No. of beds	10	8	6	7	9	5	9	2	6	4	3	3	3
Total cases	232	172	182	191	178	164	185	168	156	177	152	113	154
Average No. of beds	75	61	54	60	60	51	64	55	44	40	45	38	40

The cost to the County Council of hospital treatment of Orthopaedic cases is shown below. The variations in the cost from year to year do not exactly correspond with the number of beds occupied in each year as shown above, the explanation being that the figures for patients and beds occupied represent calendar years, whereas the cost of treatment represents payments made during the financial year.

Cost of Treatment of Cases in Robert Jones and Agnes Hunt Orthopaedic Hospital.

Scheme.	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933
	£	£	£	£	£	£	£	£	£	£	£	£	£
Tuberculosis .. .	5,281	5,431	5,205	4,436	4,986	4,398	3,208	5,055	4,989	3,695	2,619	3,195	3,239
Medical Inspection	3,299	3,194	1,356	1,414	1,728	1,894	1,663	2,047	1,434	1,003	1,567	1,067	1,269
Child Welfare... .	1,546	1,125	905	781	896	1,061	582	1,122	266	861	240	338	353
Total cost to C.C. . .	10,126	9,750	7,466	6,631	7,610	7,353	5,453	8,224	6,689	5,559	4,426	4,600	4,861

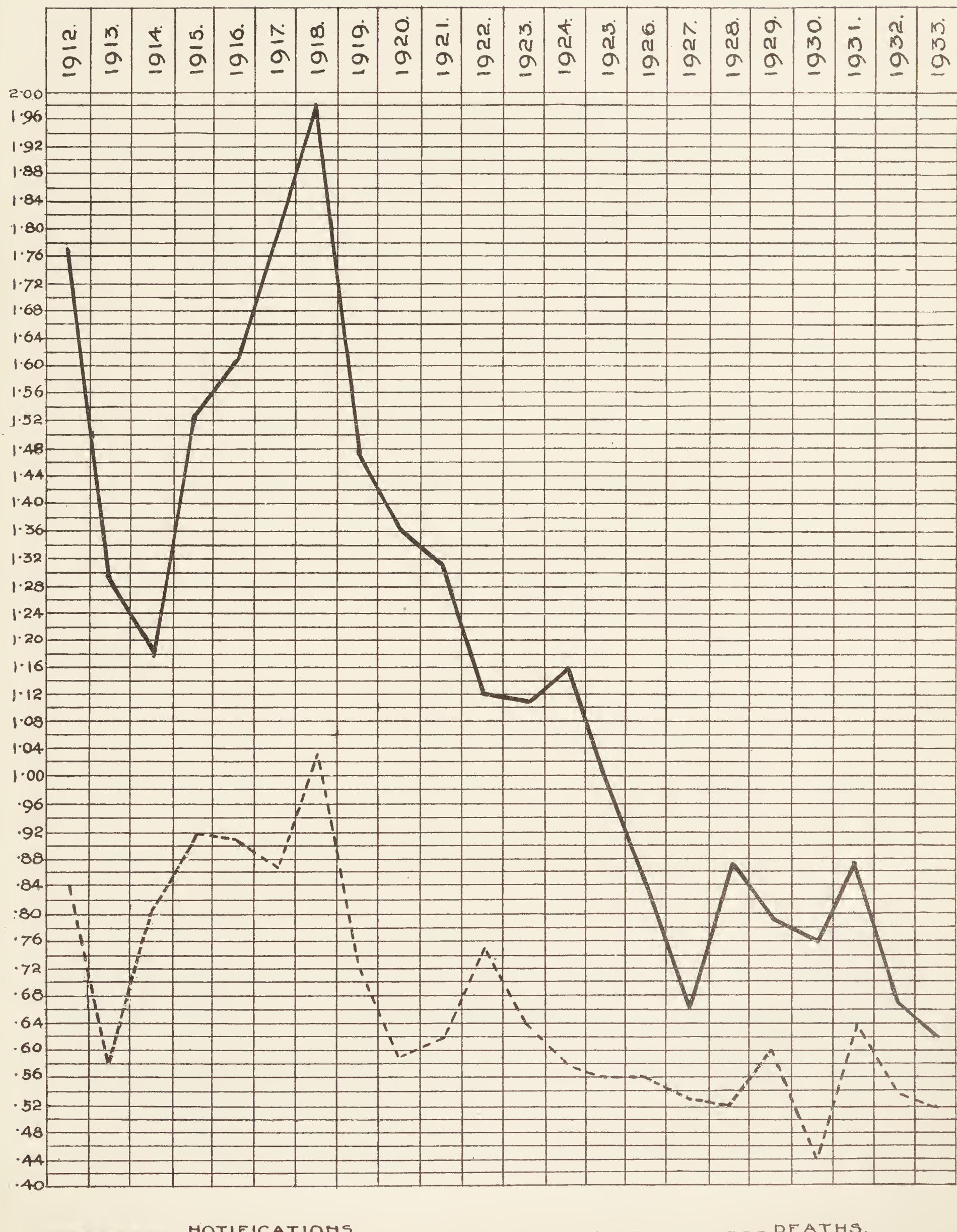
Public Assistance Cases.—In addition to the cases treated by the Public Health and Education Committees, 26 cases of non-tuberculous deformities in persons over 16 years of age were treated wholly or partly by the Public Assistance Committee at a total cost of £447 18s. 10d. The average length of stay of these cases in the hospital was 63.7 days.

TUBERCULOSIS.

Preventive Measures.—From the public health point of view, whatever steps may be taken for the treatment of patients, the measures necessary to deal with the Tuberculosis problem must be primarily and chiefly preventive in nature. These should include :—

1. Education in food values, especially in the food requirements of growing children.
2. Education in general healthy living and in the early symptoms, causes and prevention of the spread of tuberculosis.
3. The provision of better housing accommodation for the population generally and especially for families in which there is an infectious case of tuberculosis.
4. A more general use of open-air shelters, especially for children from tuberculous homes.
5. Segregation of babies born to infectious mothers.
6. Boarding out of children liable to infection in their own homes.
7. Segregation of advanced and highly infectious cases of tuberculosis.
8. A search for the source of infection in all cases, especially amongst the "Contacts" of children dying from acute generalised tuberculosis.
9. Regular supervision of infectious cases.
10. Regular supervision of "Contacts," especially contacts with a patient with an infectious sputum.
11. Improvements in the method of milk production, in order to provide a safe supply for the population generally.
12. An intimate co-ordination of all health schemes, School Medical Inspection, Maternity and Child Welfare, etc., in order to raise the general standard of health of the community.

PULMONARY TUBERCULOSIS NOTIFICATIONS AND DEATHS.
RATES 1912-1933.



Notifications and Deaths.—The following Table gives notifications and deaths from all forms of tuberculosis, grouped as pulmonary and non-pulmonary cases. There was no evidence of excessive incidence of, or mortality from, tuberculosis in any particular occupation in the county during the year, and it will be noticed that the number of notifications of, and deaths from, *pulmonary tuberculosis* fell respectively by 11 and 1. In the case of *other forms of the disease*, the number of notifications decreased by 5, and there was a fall of 1 in the number of deaths.

Notification previous to death was not received in five of the cases of pulmonary tuberculosis and in seven of the cases of non-pulmonary forms of the disease. The ratio, therefore, of notifications after death to notifications before this occurred was 1 to 13, which is an improvement on the previous year when the ratio was 1 to 11. Notification is, however, compulsory, and failure to notify in these cases previous to death is accounted for by the very rapid course of the illness. There was no evidence of wilful neglect in the matter of notification, and it was therefore not necessary to take any action to enforce it.

Notifications of, and Deaths from, Tuberculosis, 1933.

Age periods of cases.	Notifications.				Deaths.			
	Pulmonary.		Non-pulmonary.		Pulmonary.		Non-pulmonary.	
	M.	F.	M.	F.	M.	F.	M.	F.
0—1	0	0	3	1	0	0	6	2
1—5	1	0	11	5	2	0	4	2
5—10	1	2	12	13	} 0	0	3	0
10—15	1	6	13	12				
15—20	6	12	5	7	} 13	14	3	0
20—25	11	9	3	5				
25—35	22	21	0	5	} 37	18	3	5
35—45	19	10	0	4				
45—55	12	7	1	1	} 23	14	3	1
55—65	3	3	1	1				
65 and upwards	3	3	0	0	2	2	0	1
	79	73	49	54	77	48	22	11
TOTALS	152		103		125		33	

There are two facts which this table and the statistics relating to tuberculosis bring out annually. The *first* is the high incidence of the non-pulmonary forms of the disease in early life. This is accounted for by the fact that, unless infection in the form of a tuberculous patient is actually present in the home, pulmonary tuberculosis, *which is in almost every case due to the human type of organism*, is very unlikely to develop in early childhood. As, however, childhood is the great milk-drinking period, the opportunity for infection and for the development of the non-pulmonary forms of the disease, *which are in many cases due to the bovine type of bacillus*, may enter the home in the milk supply.

The *second* fact which the Table brings out is that the number of deaths from non-pulmonary tuberculosis is very much smaller than those due to the pulmonary type, not only in point of fact but relatively to the number of notifications. It should be remembered, however, that the consequences of the non-pulmonary forms of the disease are often very serious, leaving much crippling, deformity and disfigurement behind.

Relationship of Deaths to Notifications.—The following Table gives particulars of notifications and deaths during the past five years. It will be observed that, with regard to pulmonary tuberculosis, notifications and deaths roughly correspond, rising and falling together, although this is not always so. When there is a departure from this relationship, it can usually be assigned to a definitely ascertainable cause. Reference to the graph opposite page 36, which illustrates notifications and deaths from pulmonary tuberculosis since 1912, demonstrates these facts very clearly, and also indicates that a sudden rise in any particular year is almost invariably followed by a corresponding fall.

A further reference to the graph opposite page 36 will show that while notifications and deaths tend to rise and fall together, there has been a gradual approximation of the number of deaths to the number of notifications. *This is accounted for by greater accuracy in diagnosis*, due to the fact that a large number of cases are seen by the Tuberculosis Officers before notification, and points to close co-operation with the general practitioners which is so essential for the success of the Tuberculosis Scheme.

Notifications and Deaths from Tuberculosis, 1929—1933.

Year	Pulmonary.		Other forms.		Total.	
	Notifications.	Deaths.	Notifications.	Deaths.	Notifications.	Deaths.
1929	194	147	138	33	332	180
1930	184	106	119	34	303	140
1931	216	155	102	37	318	192
1932	163	126	108	34	271	160
1933	152	125	103	33	255	158

Tuberculosis Register.—A register of all cases of tuberculosis in the County is kept in the County Health Office, the number of cases at the end of the last three years being as follows:—

Number of Cases on Tuberculosis Register.

Year	Pulmonary.			Non-Pulmonary.			Total cases.
	Males.	Females.	Total.	Males.	Females.	Total	
1931	780	743	1523	546	638	1184	2707
1932	792	715	1507	569	660	1229	2736
1933	742	711	1453	569	658	1227	2680

Supervision and Examination of Contacts.—On notification of a case of pulmonary tuberculosis, the health visitor makes a full report on the home conditions and visits at regular intervals. Every case of ill-health is reported without delay to the Tuberculosis Officer, who immediately carries out a medical inspection. Children of school age from phthisis homes are also examined at each medical inspection by the Assistant School Medical Officer, and doubtful cases are referred for further examination by the Tuberculosis Officer.

Of the 152 patients notified as suffering from pulmonary tuberculosis, 43 gave a definite history of contact with a case of tuberculosis. An analysis of the home conditions of the notified cases showed that at the time of notification 83 had separate bedrooms, 34 shared bedrooms but had a separate bed, 32 shared beds, and three objected to the enquiries of the health visitor. The smallness, bad ventilation, and bad construction of many of these bedrooms are obviously factors which must contribute to the spread of infection ; and 26 cases of tuberculosis were discovered amongst the 401 contacts examined during the year.

It is of interest to note that of the 100 new Council houses erected at Judith Butts by the Shrewsbury Borough Council, 7 were let specially for re-housing tubercular families.

Home Visitation by Tuberculosis Officers and Health Visitors.—In addition to visits to the home for the purpose of examination of notified cases, " contacts," and " suspects," the services of the Tuberculosis Officers are always available to any Medical Practitioner in doubt about a patient who wishes to have the benefit of a second opinion. Below are given particulars of the visits of the Tuberculosis Medical Officers :—

On Notification	39	On discharge from Sanatorium ..	25
To contacts	254	On other occasions	745
To suspicious cases	276		

In the year under consideration the *Tuberculosis Officers* visited a total of 1,339 cases for one or other of the above reasons, and the total number of visits paid by the *Health Visitors* to phthisis homes was 2,997.

Examination of Sputum.—As it is of the utmost importance that sputum, if present, should be examined as often as necessary in every case of phthisis, arrangements have been made for the Health Visitor (with the consent of the practitioner in attendance) to obtain specimens when required so that the progress of the case and its degree of infectivity may be ascertained. The County Council provides facilities for the examination of these specimens of sputum, and medical practitioners are urged to take the fullest advantage of them.

The results of all sputum examinations are sent to the Health Visitors, who are instructed to pay particular attention to all cases from whom a positive sputum has been obtained, as such patients are of course the most infectious.

Of the 152 cases of phthisis notified in 1933, a positive sputum was obtained from 92 patients. In 35 cases the result of the examination was negative, and in 25 cases there was no sputum to examine.

Shelters.—The provision of shelters forms an important part of the Tuberculosis Scheme in order to secure sleeping accommodation for children in crowded phthisical homes, to aid in the recovery of early cases, and to accommodate advanced and therefore highly infectious patients. Shelters are sometimes provided for cases of surgical tuberculosis if their condition is such that they can in this way be looked after at home ; and in certain of these cases earlier discharge from the Orthopaedic Hospital is in this way secured.

There are at present 172 shelters in the County, 158 of which have been provided by the County Council.

Care Scheme.—There is a Central Care Committee, and there are also local Care Committees covering the whole County. The object of these Committees is to keep in touch with all cases of phthisis throughout the County, and, by means of advice and help, to enable the patient to live as far as possible a " sanatorium life." Unfavourable conditions requiring special action are reported to the Tuberculosis Officers.

Pneumothorax or Collapse Therapy.—Pneumothorax treatment consists in gradually bringing about the collapse of a diseased lung by the introduction of air between the layers of the pleura. Repeated "refills" at regular intervals are necessary over a period of years, and the rest to the lung which is thereby secured promotes healing of the diseased lung tissues. Its effects are not only curative, thereby shortening the duration of sanatorium treatment in many cases, *but are also preventive, inasmuch as the liability of the patient to spread infection is greatly reduced.*

The beneficial results of this treatment are so definite and far-reaching that it is satisfactory to be able to report a steadily-increasing application of it since it was commenced in this County ; and in the years immediately ahead of us a further expansion of this branch of the work seems likely to take place.

During 1933 artificial pneumothorax was induced in four new cases, and there are now 21 cases who regularly attend the treatment centres. Arrangements have been made for this form of treatment to be given at the Shrewsbury Tuberculosis Dispensary, Wellington Public Assistance Institution and Shirlett Sanatorium ; and 259 refills were given during the year.

X-Ray Examination.—Till recently the County Council was without an X-Ray installation of its own, and in the past, when an X-Ray examination of a patient was required, arrangements had to be made for the patient to attend either at the Shirlett Sanatorium, which is difficult of access, or at the Royal Salop Infirmary.

The amount of X-Ray work which it has been possible to carry out under these conditions has therefore been somewhat limited, and the Tuberculosis Officers have for a long time felt the need for much greater facilities for X-Ray examinations as an aid to diagnosis and in order to ascertain the progress of patients under treatment. The development of pneumothorax treatment has rendered the provision of such an apparatus still more urgent, as in order to do this work satisfactorily X-Ray control is absolutely essential.

Through the public spirit of the Trustees of the late Charles Clement Walker, who promised a grant up to £1,500 for the purpose of obtaining an efficient type of apparatus for the work, the most up-to-date and suitable type of X-Ray plant has just been installed at the Shrewsbury Tuberculosis Dispensary.

Light Therapy.—A Quadruple Carbon Arc for general treatment and a Tungsten Arc for local treatment were installed at the Tuberculosis Dispensary, Shrewsbury, in 1932. These are used for the treatment of cases of tubercular glands and tuberculosis of the skin. During the year 15 cases attended, and 791 treatments were given.

Tuberculosis of Bones and Joints.—Such cases are dealt with under the Orthopaedic Scheme, for particulars of which, see page 33.

Babies' Home Scheme.—This scheme is the outcome of the application of the principles involved in the prevention of tuberculosis, as no individual is more susceptible to tuberculosis than a newly-born child, and no one is more likely to convey infection than a mother who is suffering from the pulmonary form of the disease.

REPORT BY DR. T. R. ELLIOTT, TUBERCULOSIS MEDICAL OFFICER,

“ It may be of interest to relate the circumstances which led to the initiation of this Scheme in this county. In 1923, an ailing baby, four months old, was admitted to the Home. It did not respond to treatment and gave a positive tuberculin reaction. At the age of six months it died, when post mortem examination revealed acute extensive tuberculosis of both lungs. This led to an examination of the parents with the result that the mother was found to be suffering from chronic pulmonary tuberculosis in an infectious state. This striking evidence of the great danger to a baby of being in contact with its tuberculous parent was instrumental in originating the present Scheme. It was decided that such babies should be kept for at least twelve months at the Home, where four beds had been set apart for them. (The accuracy of this forecast of our requirements may be seen by the fact that in the eleven years since the Scheme started, 43 babies have been dealt with, or just under four a year. In 42 cases, the infected parent was the mother, and in one case the father was suffering from pulmonary tuberculosis).

“ The following are particulars of the Scheme as it exists at present :—

“ When a woman known to be suffering from pulmonary tuberculosis becomes pregnant, or where a pregnant woman is found to be suffering from tuberculosis and the home conditions are poor, or there is a likelihood of the expectant mother not receiving adequate food, she is sent to the Sanatorium until her confinement is due. For the confinement she is transferred to one of the open-air shelters at the County Council Hospital. Immediately after it is born the baby is removed to the County Home for Ailing Babies, where it remains for twelve months under open-air conditions. In the meantime, the mother is re-admitted to the Sanatorium to complete her treatment.

“ Whilst the baby is in the Home, every attempt is made for a relative, other than the mother, to take it at the end of its stay or, failing that, for it to be boarded out elsewhere. No difficulty is experienced in persuading the mother to allow the baby to go to the Babies’ Home, but difficulty often arises about its future care when the time has arrived for the child to leave the Home. Where a relative can be found who will take the baby, however, the parents invariably consent to this arrangement.

“ In four cases, the mothers’ sanction was obtained to transfer their babies to a Public Assistance Institution, where they remained during the lifetime of the mothers. In another case, consent was given by the parents for the baby to be adopted into a healthy family.

Analysis of Cases admitted.

Children in contact with	Parents' Sputum.	Babies admitted.	Tuberculin Test Result.	
			Positive.	Negative.
Tuberculous mothers	Positive ..	25	5	20
Tuberculous mothers	Negative ..	17	1	16
Tuberculous father	Negative ..	1	0	1
Totals		43	6	37

“ Four of the babies died in the Home. Of these, one—a premature baby—was in contact with its mother for one day only, and died two days after admission. One had been in contact for three months and, two days after admission, died from generalised tuberculosis. One had been in contact for fourteen days and died also from generalised tuberculosis, and the other had been in contact for four and a half months and died from broncho-pneumonia, which was probably tubercular. With the exception of the first case, the mothers were not diagnosed to be suffering from pulmonary tuberculosis until after the confinement was over. The babies were, of course, transferred to the Home as soon as possible after diagnosis, but, unfortunately, infection had already taken place.

"Up to the year 1928, the Von Pirquet Tuberculin Test was used, but since then the Mantoux Test has been in operation, as the dosage in the latter Test was considered to be more accurate and more easily controlled. One-tenth c.c. of a 1/1000 dilution of Old Tuberculin (Human) is injected intradermally. Six out of the total of 42 babies have given positive reactions. Five of them had been in contact for varying periods with mothers with a positive sputum, but the sputum of the mother of the sixth child gave a negative result. Two of the babies are very well and have shown no signs of tuberculosis up to the present ; and one child has left the County and no enquiry has been made into its subsequent history. The history of the remaining three babies is of interest. One child after having been in contact with its mother for seven months before she was diagnosed to be tubercular, developed broncho-pneumonia and otitis media, the latter probably of tubercular origin. The child is now quite well. Another child was in contact with its mother for six weeks, and afterwards developed tubercular glands in the neck with abscess formation. The condition cleared up under treatment. The third baby, who had been in contact with its mother for fourteen days before she was diagnosed to be suffering from acute exudative pulmonary tuberculosis, gave a positive Mantoux Test when it was sixteen days old and died from generalised tuberculosis at the age of three months.

"Whilst the last case illustrates the great liability to contract fatal tuberculosis from close contact with a tuberculous parent, the other two indicate that infection in infancy may not always be fatal.

"It is satisfactory to note that all the babies removed to the Babies' Home immediately after birth gave a negative Tuberculin Test, and up to the present none have exhibited any signs of tubercular disease. The experience at the Babies' Home, therefore, confirms the opinion that children of tubercular parents do not inherit tuberculosis, but contract it after birth by exposure to an infectious case.

"Investigations have been made regarding all the other cases but, apart from the usual childhood ailments such as measles, etc., they have all remained in good health.

"The Babies' Home Scheme fills a very important place in our Anti-Tuberculosis Service by removing babies who cannot possibly have acquired immunity to the risk of infection in the home. Whilst some of the infected cases recover, others succumb to an acute generalised tuberculosis. The only reasonable explanation is that the child's chance of survival depends upon the size of the dose of infection. If it is small, recovery is practically assured, but if large, the child succumbs. *As there is no means of even calculating, much less controlling, the size of the dose of infection in the parents' home, the only safe way of dealing with these cases is by segregation, this being secured by admission to the Babies' Home, during the danger period.*"

Prees Heath Sanatorium.—There are eleven beds in this hospital, which is intended for the reception of small-pox cases, but which is utilised, in the absence of an outbreak of this disease, for the accommodation of patients in an advanced stage of pulmonary tuberculosis, who are highly infectious and who cannot otherwise be properly provided for. Its main function is preventive, and accommodation for advanced cases is therefore an important part of any tuberculosis scheme.

The beds provided for such cases are insufficient in this County and, in order to utilise the beds in Prees Heath Sanatorium to the greatest advantage, it has been found necessary to limit their use almost entirely to female patients. Accommodation for male patients in an advanced stage of the disease has therefore to be found in the various Public Assistance Institutions, and, although shelters are provided for these patients, the arrangement is not at all satisfactory. Special provision for male patients is therefore urgently necessary.

During the year sixteen patients were admitted to Prees Heath Sanatorium, four were discharged and nine died.

Shirlett Sanatorium.—There are 62 beds in this Institution, which has been provided by the Association for the Prevention of Consumption in the County of Salop and the Hundred of Maelor, and to which the County Council sends all cases of pulmonary tuberculosis likely to improve under institutional treatment. The following are the particulars of the admissions, discharges and deaths during 1933 :—

			Admitted.	Discharged.	Died..
Males	..	..	49	50	4
Females	..	..	38	31	2

Analysis of the Cases admitted to Shirlett Sanatorium since its opening in 1911.

Year	Patients treated.	Known to be Alive.	Known to be Dead.	Left County.	Unaccounted for.	Cured.	Non-Tuberculous.†
1911	38	10	20	7	1	..	..
1912	74	29	29	11	3	2	..
1913	80	28	40	9	1	2	..
1914	114	34	61	13	1	5	..
1915	133	41	56	24	1	10	1
1916	158	43	71	27	..	16	1
1917	164	63	67	19	..	13	2
1918	124	27	47	36	..	13	1
1919	123	46	45	23	..	9	..
1920	120	48	48	16	..	8	..
1921	121	48	55	14	..	4	..
1922	107	33	60	13	..	1	..
1923	109	36	52	18	..	3	..
1924	151	65	58	21	..	6	1
1925	130	56	53	17	..	4	..
1926	110	39	51	18	..	2	..
1927	86	33	46	7	..	*	..
1928	111	58	44	9	..	*	..
1929	113	54	48	10	..	*	1
1930	113	63	39	11	..	*	..
1931	115	74	36	4	..	*	1
1932	107	74	26	3	..	*	4
1933	87	81	5	1	..	*	..

* Cases are not described as cured until after the lapse of at least 5 years.

† These cases were admitted for observation and afterwards diagnosed as non-tuberculous.

Tuberculosis Dispensaries and Examination Centres.—Tuberculosis Dispensaries were held twice weekly at Wellington, weekly at Shrewsbury and Oswestry, and once a month at Whitchurch, Ludlow and Bridgnorth. In addition, under an arrangement made by the Church Stretton Care Committee, three sessions were held for examination of contacts and thirty-seven attendances were made. Below are particulars of attendances at the Tuberculosis Dispensaries:

Attendance at Tuberculosis Dispensaries in 1933.

Dispensaries.	No. of cases who attended during the year.	SUMMARY OF ATTENDANCES.								Total attendances	
		Notified Cases.				Non-notified Cases.					
		For the first time.	School Children.	Other Persons.	School Children.	Other persons.	Con-tacts.	Sus-pects.	Con-tacts.	Sus-pects.	
	Total.										
Shrewsbury ..	325	143	252	395	53	83	107	148		1038	
Oswestry ..	181	68	116	320	22	37	35	37		567	
Wellington ..	577	234	1579	1535	133	263	79	350		3939	
Whitchurch ..	61	36	31	44	17	22	9	25		148	
Ludlow ..	68	26	2	80	13	14	11	16		136	
Bridgnorth ..	82	39	39	80	18	39	15	17		208	
Totals ..	1294	546	2019	2454	256	458	256	593		6036	

Death Rates in County Districts.—The Table below gives particulars with regard to death-rates for the Urban and Rural Districts in ten-yearly periods from 1901 to 1930, whilst those for the years 1931 to 1933 are given separately.

Death-rates from Pulmonary Tuberculosis, 1901—1933.

	Estimated Population, 1933.	Average Death-rate for ten year periods.				Rates for	
		1901 to 1910	1911 to 1920	1921 to 1930	1931	1932	1933
Urban Districts	117,000	1.133	.960	.679	.748	.659	.529
Rural Districts	126,900	.825	.700	.525	.537	.384	.497
Whole County	243,900	.961	.816	.580	.636	.516	.513
England and Wales	40,201,000	1.146	1.007	.768	.742	.687	.693

Public Health (Prevention of Tuberculosis) Regulations, 1925, and the Public Health Act, 1925 (Section 62.)—No action was necessary during the year.

MILK SUPPLY.

Tubercle in Milk.—Very little will be done to secure a safe milk supply until the problem of tuberculosis in cattle is tackled in the same way as amongst human beings, namely, by methods of *prevention*. The same, or at least corresponding conditions, are at the root of the problem in both cases. This means in the case of cattle insanitary, dirty, crowded, ill-ventilated and badly lighted cowsheds—conditions which promote the spread of infection from one animal to another. In a cowshed to which the above description applies—and such cowsheds are only too common—the introduction of one infectious animal will almost inevitably infect the lot, and sooner or later they will one by one begin to give tuberculous milk.

Veterinary Inspection.—It is not therefore by veterinary inspection alone that a safe milk supply will be secured. Veterinary inspection can only detect the presence of tuberculosis in cattle when the disease is in a comparatively advanced stage, and the first step towards the elimination of tuberculosis in cattle will have been secured only when cowsheds generally have been raised to a proper hygienic standard. If veterinary inspection is to be really effective as a means of discovering cows giving tuberculous milk it will have to be accompanied by free sampling of the milk for biological examination. It not infrequently happens that when milk from some particular farm is found to contain tubercle bacilli the veterinary inspector cannot find the tuberculous cow, and it is finally only detected by biological examination of individual samples of milk. The chief value of routine veterinary inspection, therefore, will consist in eradicating the most dangerously tuberculous animals by clinical examination and, while this will be helpful, it will not secure a safe milk supply or do much to solve the problem of bovine tuberculosis either in cows or human beings. The presence of other and more difficult cases will be ascertained by sampling of the milk, and, if it is known that tubercle bacilli are present in the milk of a dairy herd or herds, the time of the veterinary surgeon would be much better spent in inspecting such herds—taking individual samples (and also bulk samples of milk from groups of cows) for biological examination—than in continuing routine inspections which must result in a large proportion of the offending animals going undetected. It is for this reason that, if and when whole-time veterinary inspectors are appointed, there should also be introduced a scheme for the routine sampling of milk for biological examination.

Notwithstanding all these measures, unless a milk has been obtained from a herd which has passed the tuberculin test it should always be boiled or pasteurised before being used for human consumption. The deleterious effect of boiling of milk is so slight that it can be considered either non-existent or negligible.

Milk and Dairies (Consolidation) Act, 1915.—Action is only taken under Section 4 of this Act when the presence of tubercle bacilli in milk produced in this county is reported by another Authority. Occasionally, however, investigations are conducted where the supply has otherwise come under suspicion. One of the part-time veterinary surgeons is then sent to inspect the animals on the farm where the milk is produced.

Below are details of the work carried out during the year as a result of reports submitted by outside Authorities :—

Total number	of farms affected	..	..	..	34
	of visits made	..	..	..	40
	of cows examined	..	..	..	1,238

Samples taken :—319 (Individual 198, Bulk 121).

Results :— { Positive 52 (Individual 34, Bulk 18).
 { Negative 267 (Individual 164, Bulk 103).

The presence of tubercle bacilli in 18 bulk samples necessitated the re-examination of 193 cows, and the figures for this further sampling are included above.

Of the 34 cows dealt with as a result of this sampling, post mortem examination showed that 8 were suffering from tuberculosis in an advanced stage, 14 from generalised tuberculosis not advanced, and 12 from localised tuberculosis.

In addition, four animals were dealt with by the Veterinary Officer at sight, and two of them on post mortem examination revealed the disease to be in an advanced stage.

Five tuberculous cows were found at one farm, four at another, and three each at two other farms.

Tuberculosis Order, 1925.—This Order requires every person knowing of the existence of a bovine animal showing definite clinical signs of tuberculosis to report the matter to the Police in order to have it dealt with. Usually, before anyone is in a position to do so, however, the animal is already heavily infected with the disease and has been highly infectious for a considerable period.

Results of Post Mortem Examinations, 1933.

Description of Animals.	A. Tuberculosis of the Udder.	B. Giving tuberculous milk and showing Lesions of Tuberculosis.	C. Tuberculous Emacia-tion.	D. Affected but not as in Columns A, B, C.	E. Not affected.	Total.
Cows in milk ..	57	23	218	224	2	524
Other cows or heifers ..	10	2	165	135	..	312
Other bovine animals ..	..	..	3	8	..	11
Totals ..	67	25	386	367	2	847

Milk and Dairies Order, 1926.—No arrangements have been made by the County Council for the routine inspection of cattle under Article 8 of this Order.

There were 13 notifications that milk from this County was being produced under unclean conditions. The producers were communicated with and the Agricultural (Education) Department and the District Medical Officer of Health were informed with a view to suitable action being taken to bring about an improvement in the methods and secure the production of milk of a higher standard of cleanliness.

Milk (Special Designations) Order, 1923.—Under this Order licences to produce graded milk are issued to those producers who have complied with specified conditions relating to the standard of cleanliness of the milk, the health of the herd, and the condition of the cowsheds.

The position at the end of the year under this Order as compared with that for previous years was as follows :—

	No. of Producers.			
	1930	1931	1932	1933
Licensed to produce—				
Certified Milk..	1	2
Grade A (T.T.) Milk	4	6
Grade A Milk	9	11
			—	—
			14	19
			—	—
			21	28
			—	—

In addition, six licences for bottling Grade A Milk were granted during 1933.

An arrangement has been made whereby Sanitary Inspectors in whose areas Grade A Milk farms are situated take samples of the milk every quarter on behalf of the County Council. These are sent for examination to the laboratory at the Harper Adams Agricultural College. The sampling revealed that generally speaking the milk was of a high standard of cleanliness, with a bacterial count in most cases under 10,000 and bacillus coli absent from 1 c.c.

Accredited Milk Producers.—The Agricultural (Education) Committee have initiated a scheme under which a Register (known as the Accredited Milk Producers Register) is kept, and in which are entered the names of all milk producers who have applied for enrolment and have satisfied the Registration Authority that they have consistently produced a milk of the standard of cleanliness required by the conditions governing the scheme. Samples of milk are taken and examined regularly, and the premises of the producers are inspected by officials of the Agricultural Department who, in the event of an unsatisfactory sample being obtained, go into the question, in order to ascertain the cause, and advise on methods of how best to secure the production of clean milk.

The general public ought to exercise an intelligent discrimination in their purchase of milk, and should show their appreciation of the progressive attitude of the Accredited Milk Producers, whose only reward is the satisfaction of knowing they are producing a clean milk, by obtaining their supply as far as possible from them unless, of course, it can be obtained from a producer of one of the Graded milks.

MENTAL DEFICIENCY.

Duties.—The responsibility of making provision for mental defectives does not lie entirely with the Mental Deficiency Committee, as under the Education Act, 1921, it is the duty of the Local Education Authority to make provision in special schools for educable mentally defective children between the ages of 7 and 16 years. Such children come into the category of the merely feeble-minded. The Mental Deficiency Committee, therefore, is responsible for all defectives, whatever the degree of defect, who are not between 7 and 16 years of age, and also for defectives between those ages whose degree of defect is so great that they cannot be educated even in special schools ; and such cases are reported to the Mental Deficiency Committee to be dealt with by them.

Ascertainment.—According to the findings of the Wood Committee, a Joint Committee of the Board of Control and Board of Education, it has been estimated that eight per thousand of the population are mental defectives ; and on this basis there should be about 1,950 of such cases in the County, of whom (according to the above Committee) about one-third are believed to be in need of institutional accommodation under the Mental Deficiency Acts.

Ascertainment of mental defectives is considered to have been very thoroughly carried out in this County, and below are given particulars of all cases concerning whom information was available on 31st December, 1933 :—

Reported under Mental Deficiency Acts up to 31st December, 1933.

Degree of Defect.	Grand Totals.	Under 16.		16—30		Over 30		Age unknown		Totals.	
		M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Moral Defectives	5	..	..	2	1	..	2	..	..	2	3
Feeble-minded	878	25	10	301	248	92	155	15	32	433	445
Imbeciles	242	53	41	66	42	14	24	..	2	133	109
Idiots	47	7	6	10	7	8	9	..	..	25	22
Totals	1172	85	57	379	298	114	190	15	34	593	579
		142		677		304		49		593	579

These cases are dealt with in the following ways :—

		M.	F.	Totals.
In Institutions for Mental Defectives	.. .. ..	72	91	163
On Licence out of Institutions	.. .. ..	2	3	5
Under Guardianship .. .. ..	.. .. ..	3	11	14
In Salop Mental Hospital .. .. ..	.. .. ..	46	40	86
Under Supervision by Health Visitors .. .. ..	.. .. ..	140	100	240
Ascertained, but not medically examined .. .. ..	.. .. ..	158	199	357
In Public Assistance Institutions .. .. ..	.. .. ..	51	77	128
Medically Examined, but not requiring supervision .. .. ..	.. .. ..	121	58	179
		593	579	1172

Mentally Defective Children (Educable) under the Education Committee, 31st December, 1933.

		M.	F.	Total.
In Special Schools .. .. ..	.. .. ..	11	8	19
Awaiting admission to a Special School	0	5	5	5
Under supervision of School Nurses	127	71	198	198
		138	84	222

There are in addition 134 school children, 78 boys and 56 girls, whose mental condition has been called in question, of whom it has been estimated that 50 per cent. will prove to be feeble-minded. It has been calculated, therefore, that there is a total of 289 feeble-minded children under the Local Education Authority.

Provision under the Mental Deficiency Acts.—Mental Defectives can be provided for under the Mental Deficiency Acts in two ways, namely, by accommodating them in institutions, or by placing them under guardianship.

Licence however can be granted to certain defectives who have improved with institutional training, and such defectives are allowed out on trial under the care of a reliable person.

Comparative Figures.—According to the *figures of the Board of Control*, which are based on the findings of the Wood Report, there are 666 mental defectives in this County for whom the Mental Deficiency Committee ought to make special provision under the Act. They are grouped as follows:—

			Male.	Female.	Total.
Children under 16	..	..	67	45	112
Between 16 and 30	..	..	120	148	268
Over 30 years of age	..	..	135	151	286
			322	344	666

According to the *information actually available* on 1st January, 1934, the statutory duties of the County Council would be fulfilled by making provision for 432 mental defectives grouped as follows:—

			Male.	Female.	Total.
Children under 16	..	..	31	14	45
Between 16 and 30	..	..	78	101	179
Over 30 years of age	..	..	69	110	179
			178	225	403

The number of mental defectives for whom the County Council had *actually made satisfactory provision* according to the requirements of the Board of Control (*i.e.*, in certified institutions, on licence, or under guardianship) on 1st January, 1934, was as follows:—

			Male.	Female.	Total.
Children under 16	..	..	18	7	25
Between 16 and 30	..	..	40	61	101
Over 30 years of age	..	..	11	17	28
			69	85	154

Institutional Accommodation.—The fact that in this County no real provision has been made for mental defectives has added greatly to the difficulties of the work. Very definite proposals to meet the requirements of the County have, however, been formulated and approved, and it is probable that at a comparatively early date we shall have in this County the nucleus of a colony for the accommodation of mental defectives.

MENTAL TREATMENT ACT, 1930.

There are in the County three Authorities under this Act, namely, the County Council, the Borough of Shrewsbury, and the Borough of Wenlock. The position at present is that the County Council has made arrangements for the admission of *temporary* and *voluntary* patients to the Salop Mental Hospital, but so far no clinics for the treatment of out-patients have been opened.

VENEREAL DISEASE.

Although a great deal of permanent invalidity and ill-health can definitely be attributed to venereal diseases and their complications, until these diseases become notifiable it is impossible to say what is the position with regard to them and to what extent the situation is being met by the facilities which the responsible Authorities provide for obtaining treatment. There is no doubt that untreated venereal disease, or venereal disease in which the treatment has not been completed owing to failure on the part of the patient to attend, results in the development of pathological conditions very often not attributed to the primary cause. The School Medical and Child Welfare Services are utilised for finding out cases of venereal disease, particularly congenital syphilis, and following them up, and twelve such cases have been referred for treatment during the year.

Arrangements for Treatment and Diagnosis.—The Venereal Diseases Scheme consists of—

- (1) Provision of treatment at :—
 - (a) The County Council Clinic, Belmont, Shrewsbury.
 - (b) Wolverhampton and Staffordshire General Hospital.
 - (c) Arrangements with the surrounding Hospitals.
 - (d) Arrangements whereby girls can be sent for treatment and training to a Home at Wolverhampton provided by the Lichfield Diocesan Society. The Home also provides treatment for pregnant women suffering from venereal disease.
- (2) Arrangements for supplying Salvarsan Substitutes to Medical Practitioners.
- (3) Provision of facilities for diagnosis in connection with the Birmingham and Bristol Universities and at the County Clinic.

Number of Cases and Attendances.—There has been no great variation in the number of cases of venereal disease attending for treatment under the County Council Scheme during 1933 : 162 cases of syphilis attended (an increase of one on last year), and 207 of gonorrhoea (an increase of 18).

Cases of Venereal Disease Treated in 1933.

Cases suffering from	Shrewsbury Clinic.						Wolverhampton and Staffordshire General Hospital. (Shropshire Patients.)	
	Cases.			Attendances.			*Cases.	Attendances.
	M.	F.	Total.	M.	F.	Total.		
Syphilis	72	90	162	465	710	1175	4	
Soft Chancre	3	1	4	10	0	10	0	957
Gonorrhoea	156	51	207	1118	223	1341	12	
Other conditions	46	42	88	94	89	183	18	
Total for 1933	277	184	461	1687	1022	2709	34	957
Total for 1932	266	180	446	1842	1163	3005	31	910

* These numbers only refer to cases attending for the first time in 1933.

Cleveland House, Wolverhampton.—This Hostel is available for girls and women suffering from venereal disease, who cannot receive proper treatment in their own homes. During the year 2 cases of syphilis and 2 cases of gonorrhoea were admitted from this County. Another woman suspected to be suffering from syphilis was admitted, but proved to be non-venereal.

Examination of Pathological Specimens.

Nature of Test.	Number of Tests made at					Chester Royal Infirmary.
	Shrews-bury Clinic.	Birming-ham University	Bristol University	Royal Hospital, Wolverhampton.		
For detection of gonococci	206	49	17	119	1
For detection of spirochetes	1	..	..	..
For Wassermann reaction	180	315	83	2

BACTERIOLOGICAL DIAGNOSIS OF DISEASE.

Under an arrangement with the County Council, Birmingham University undertakes the examination of specimens sent for the purpose of diagnosis of disease.

In addition to the work done in connection with Venereal Disease referred to above, the following examinations were made:—

					Pos.	Neg.	Total.
Tubercle Bacilli (Sputum)	.. ..	.. ..	.. ..	.. ..	33	248	281
„ „ (Pleural fluid)	.. ..	.. ..	.. ..	.. ..	0	3	3
„ „ (Cerebro-spinal fluid)	.. ..	.. ..	.. ..	.. ..	0	2	2
„ „ (Faeces)	.. ..	.. ..	.. ..	.. ..	1	2	3
Meningococci (Cerebro-spinal fluid)	.. ..	.. ..	.. ..	.. ..	0	3	3
„ (Nasal swab)	.. ..	.. ..	.. ..	.. ..	0	1	1
Haemolytic Streptococci (Throat swab)	.. ..	.. ..	.. ..	.. ..	18	22	40
„ „ (Cervical swab)	.. ..	.. ..	.. ..	.. ..	1	0	1
„ „ (Nose swab)	.. ..	.. ..	.. ..	.. ..	0	2	2
„ „ (Vaginal swab)	.. ..	.. ..	.. ..	.. ..	0	2	2
Diphtheria Bacilli (Secretion from the Throat)	.. ..	.. ..	.. ..	.. ..	347	1953	2300
Paratyphoid Bacilli (Faeces)	.. ..	.. ..	.. ..	.. ..	3	1	4
„ „ (Urine)	.. ..	.. ..	.. ..	.. ..	0	4	4
Typhoid Bacilli (Faeces)	.. ..	.. ..	.. ..	.. ..	2	8	10
„ „ (Urine)	.. ..	.. ..	.. ..	.. ..	0	3	3
Blood for Widal's Reaction	.. ..	.. ..	.. ..	.. ..	3	73	76
Dysentery Bacilli (Faeces)	.. ..	.. ..	.. ..	.. ..	0	2	2
Vincent's Angina (Swab)	.. ..	.. ..	.. ..	.. ..	0	1	1
Totals for 1933					408	2330	2738
Totals for 1932					622	3125	3747

BLIND PERSONS ACT, 1920.

The Blind may be considered as falling into three classes—those under 5 years of age, those between 5 and 16, and those over 16 years of age.

Those under 5 years of age come automatically under the supervision of the Health Visitors, who visit them regularly under the Maternity and Child Welfare Scheme. Children between 5 and 16 years of age come under the care of the Elementary Education Authority, who make provision for them by sending them to a Special School for the Blind. As regards those over 16 years of age, the Higher Education Committee arrange for the training of such as are capable of benefiting from special instruction and of learning an occupation which is likely to enable them partly or wholly to support themselves. On completion of training under an arrangement made by the County Council they come under the Home Workers' Scheme of the Birmingham Royal Institution for the Blind, which arranges for their supervision by home teachers and supplies them with materials at cost price, assists them with their work, and helps them to dispose of the articles for which they are unable to find a sale and, in addition, supplements their wages according to their earnings.

Unemployable blind persons, and also those whose needs are not adequately provided for by the methods outlined above, either come under the County Council Scheme for the Domiciliary Relief of the Blind or receive assistance from the Shropshire Association for the Blind.

Domiciliary Relief of the Blind.—All blind persons *under* 50 years of age, and also those over that age in need of greater assistance than a payment of 5/- a week, are dealt with under the County Council Scheme. The expenditure on this service during the financial year 1933—4 was £994, compared with £730 for the previous year. Those *over* 50 years of age who are unemployable and whose requirements can be met by a payment of 5/- weekly, receive assistance from the Shropshire Association for the Blind. In this way, overlapping in the matter of giving relief is avoided.

Shropshire Association for the Blind.—This Association (which received a grant of £878 from the County Council), in addition to making payment to certain of the unemployable blind who are over 50 years of age, exercises a general supervision over the welfare of all blind persons. A Home Teacher has been appointed by the Association, who visits all the blind persons in the County, teaches them Moon and Braille, arranges for them to be supplied with books, and reports to the Secretary of the Association, who draws the attention of the County Council to blind persons who are in need of assistance under one or other of the schemes.

Certification of Blindness.—Circular 1353 (issued by the Ministry of Health, in consultation with the Board of Education, after considering the report of the Prevention of Blindness Committee appointed by the Union of Counties Association for the Blind), *recommends* that, subject to slight modification, the form of certification of blindness drawn up by this Committee be adopted by all authorities under the Blind Persons Act, 1920.

The form of certificate recommended is very elaborate and could only be filled up by a medical practitioner having “special experience in ophthalmology.” The Minister has taken this opportunity of again stressing the necessity of having all examinations, which are carried out with a view to the certification of blindness, done by such a medical practitioner. “Special experience in ophthalmology” is defined in the circular. A copy of each certificate given in the form proposed is to be sent to the Secretary of the Prevention of Blindness Committee which will collate statistics.

This procedure with regard to certification is designed to serve two purposes. While its primary purpose is the certification of the individual, it is also intended to serve as a means of collecting a mass of information regarding the causes of blindness with a view to such information being used for the purpose of determining by what means blindness can be prevented.

It may be stated here that the Board of Education have made the use of this form of certificate compulsory in the case of school children certified as blind within the meaning of Section 69 of the Education Act, 1921.

Register of Blind Persons.—A Register of all blind persons, compiled chiefly on information supplied by the Secretary of the Shropshire Association, is kept in the County Health Offices. No name is entered in the Register unless a certificate of blindness within the meaning of the Blind Persons Act has been received from a medical practitioner with special experience in ophthalmology, except in the case of those prevented by age or infirmity from making the journey necessary to undergo this special examination. Such cases are examined by one of the County Council Assistant Medical Officers who, if satisfied of the existence of blindness within the meaning of the Act, gives the necessary certificate. Under this arrangement no difficulty has so far arisen.

Particulars of Blind Persons on the Register of the Blind on 31st March, 1934.—The following are the particulars of the blind persons in the County, as supplied by the Secretary for the Shropshire Association for the Blind, on 31st March, 1934 :—

Age periods.	Male.	Female.	Total.
0—5	0	2	2
5—16	10	2	12
16—21	5	2	7
21—50	53	29	82
50—70	75	50	125
70 and over	46	54	100
 Totals for 1933—34	 189	 139	 328
 Totals for 1932—33	 183	 138	 321

The cause of blindness in all these cases has not been investigated but, speaking generally, blindness under 5 years of age is either due to ophthalmia neonatorum or to congenital defects. Blindness commencing over 50 years of age is to a large extent due to degenerative causes such as cataract, whereas in the intermediate ages a considerable proportion of the blindness has probably been due to accident. The excess of blindness in males over females between the ages of 21 and 50 (males 53, females 29) is strong evidence of this.

The following statement is from the report of the Shropshire Association for the Blind for the year ended March 31st, 1934 :—

No. on Register, 1/4/33	..	..	..	..	321
Added during the year :—	Ascertained	..	..	31	
	Came to Salop	..	..	3	
				—	34
Being trained and at school	..	..	..	..	15
Home Workers	..	..	..	..	22
Old Age Pensions secured for	..	..	..	..	11
Number of weekly grants awarded	..	..	..	..	76
Patients taken to Hospital	..	..	..	..	49
Deaths	..	..	..	..	21
Transferred	..	..	..	..	4
Taken off Register	..	..	..	..	2
Total on Register 31st March, 1934	..	..	..	..	328

FOOD AND DRUGS.

By arrangement with the Chief Constable for Shropshire, samples of food and drugs are taken by the County Police under the Food and Drugs Acts, and are sent to the County Analyst for examination. Particulars of the results and of any action taken as a consequence are given below.

Return of Samples taken for Analysis during the year 1933.

Nature of Sample.	Number taken.	Genuine.	Adulterated.	Remarks.
Milk	181	167	14	6 Cautioned. 3 persons fined— (1) £1 and £4 3s. 11d. special costs. (2) To pay costs £4 11s. 8d. (3) £5 and £1 1s. 0d. special costs.
Potted Meat	6	6	..	
Oatmeal	5	5	..	
Butter	4	4	..	
Pepper	5	5	..	
Lard	2	2	..	
Rice	9	9	..	
Brawn	4	4	..	
Sausage	5	3	2	
Jam	6	5	1	
Flour	2	2	..	
Vinegar	5	5	..	
Rum	2	2	..	
Peas	2	2	..	
Whiskey	2	2	..	
Cider	2	2	..	
Margarine	3	3	..	
Mustard	2	2	..	
Cream of Tartar	2	2	..	
Bicarbonate of Soda	2	2	..	
Total Samples ..	251	234	17	

Antimony Poisoning.—A memorandum recently issued by the Ministry of Health draws attention to the danger of antimony poisoning from certain enamelled vessels used for the storage and preparation of food or drink. The memorandum states that the public should be warned of this danger.

The danger has apparently arisen since antimony has been used to replace the more costly tin as an opacifying agent. The danger lies especially in the use of cheap enamelled ware in connection with such acid preparations as lemon drinks, which disintegrate the enamel and set free the antimony. At least three serious outbreaks of antimony poisoning have been brought about in this way, and in one case the jugs used were guaranteed "to be perfectly safe in use and free from any injurious substances."

EDUCATION IN HEALTH.

Although education in matters pertaining to health is of the utmost importance, pressure of other duties is the great limiting factor in health propaganda work. During the year, 106 lectures were given in schools at the close of medical inspections by the Assistant School Medical Officers. In the Child Welfare Centres 372 were given by the Medical Officers and Health Visitors in attendance. The Inspector of Midwives, who also holds the position of County Health Lecturer, gave 23 lectures at various Women's Institutes and other centres; two lectures were given by the Tuberculosis Medical Officers and 24 lectures were also given under the auspices of the Shropshire Branch of the Midwives Institute.

Notwithstanding the value of specially organised health propaganda work, education in health matters is so important that this is a subject which ought to be much more fully dealt with in the schools, and should therefore be given a more adequate place in the ordinary school curriculum. The great limiting factor in the usefulness of lectures given to the public is the fact that the specially qualified lecturer is usually under the necessity of starting from the beginning of the subject, as the knowledge of a large part of the audience must be assumed to be nil. The ground which he can cover is limited and he seldom gets beyond the elementary facts which ought to be, and in many cases are, common knowledge. No doubt the public ought to be reminded of these facts, but children ought not now to leave school so ignorant of them that they should be the subject of special lectures. Knowledge of health matters is probably most effectively spread by consistently teaching mothers, whose children are undergoing examination, the factors which have contributed to some unsatisfactory state of affairs and the reasons for the precautions which ought to be taken in the future.

AMBULANCES.

Two motor ambulances are owned by the County Council, one stationed at a garage in Shrewsbury and the other at the County Council Hospital. The one which is kept in Shrewsbury is generally available for patients being removed to or from any house or hospital in Shropshire, and is utilised both for infectious and ordinary cases. It was used on 396 occasions and covered a distance of 10,480 miles. Whenever the ambulance is used for an infectious case, the Sanitary Inspector of the District is responsible for taking the necessary steps for its disinfection afterwards. The ambulance at the Hospital is used chiefly by this institution, but is available elsewhere if required. In addition, there is at the Hospital a converted ambulance which is used as a staff van which can be, and sometimes is, used to serve the purposes of an ambulance.

Other ambulances are owned by Bridgnorth Borough, Wellington Urban, and Market Drayton Urban Councils, Oswestry and Chirk Joint Hospital Committee, Ellesmere Cottage Hospital, Ludlow, Shrewsbury, Oswestry and Whitchurch Local Voluntary Aid Detachments, and Oakengates Ambulance Committee.

A circular issued by the Ministry of Health deals with the lack of reciprocal arrangements between Local Authorities with regard to ambulance facilities. Each Local Sanitary Authority is urged to consider whether the facilities at present available in its area are adequate and, if not, to take the necessary steps to remedy the existing deficiency. The suggestion is made that in certain districts provision could most suitably be made through the County Council, and that in other districts better arrangements could be made for the use of the ambulance of an adjoining Authority.

The Minister of Health considers that no rule should be made restricting the use of an ambulance to the employing Authority, that each Local Authority should have an understanding with neighbouring Authorities, and that no sick person should be required to change from one ambulance to another.

No such restrictions apply in the case of the ambulances in this County, and the County Council ambulances are available over the whole area.

Dr. White, in his Report for the Newport Urban District, states :—“ I would respectfully suggest the re-consideration of the question of the provision of an ambulance for the district. The increasing number of accidents make it an essential part of the equipment of Local Authorities, and the delay in the removal of the injured and unsuitable conveyances no doubt contribute to many fatal results.”

RIVER POLLUTION.

Although a comparatively small area of the north-western part of the County drains into the River Dee, the chief concern of the County Council in connection with Rivers Pollution Prevention is the River Severn. While there is no very serious pollution of the River in view of the volume of water which flows down it, certain minor tributaries of the Severn show at parts rather gross pollution, but they do not seriously affect the purity of the main river.

There is, however, no justification for the pollution of these smaller streams, and it is indefensible that heavily polluted water should be drunk by cattle.

Severn Survey.—In accordance with the arrangements made by the Ministry of Agriculture and Fisheries with those County Councils and County Borough Councils through whose administrative areas the River Severn flows from its source, with the object of securing a complete survey of the river on one particular date, and thereby obtaining a picture of the condition of the river as a whole, Dr. Weston, Deputy County Medical Officer of Health, took five samples at different points between Shrewsbury and Coalport. The water was in a reasonably satisfactory condition when it entered the section surveyed, having a high figure for dissolved oxygen and a low figure for ammoniacal nitrogen. There was a considerable decrease of dissolved oxygen and also an increase of nitrogen at Atcham, but at Buildwas the water had largely recovered and its condition remained satisfactory throughout the section. It is remarkable that the amount of crude sewage that must enter the river at Ironbridge and Jackfield had had little effect on the condition of the water.

HOUSING.

The withdrawal of grants under the Housing (Financial Provisions) Act, 1924, has practically limited the activities of the District Councils to what can be done under the Housing Act, 1930, and the Housing (Rural Workers) Act, 1926. The County Council has special responsibility with regard to rural housing conditions under the former Act, and is required to make a grant of £1 per annum for a period of forty years towards the cost of new houses erected by Rural District Councils which are inhabited by members of the agricultural population or people of substantially the same economic conditions. So far the County Council's liability in this matter has been limited to making grants in respect of nine houses in the Newport Rural District, nine houses in the Clun Rural District, and twelve houses in the Oswestry Rural District, but as the housing schemes of the various Rural District Councils have not yet fully materialised the amount which the County Council will be required to contribute annually may be expected to increase substantially.

Amongst the District Councils generally there has been greatly increased activity in the matter of housing. The Minister of Health issued a Circular letter early in 1933 stating that he considered that the rate at which slums were being dealt with was far too slow, and local authorities, who have had the duty of inspecting and recording housing conditions for the last twenty years and should therefore be familiar with housing conditions in their own areas, were requested to draw up time tables with regard to the work to be undertaken and to fix time limits for its completion, the time limits and programmes being of such a nature that all clearance areas will have been dealt with by the end of 1938. These programmes were required to be in the hands of the Minister not later than the end of September, 1933.

The following are the more important matters referred to in the Reports of the District Medical Officers of Health :—

Atcham Rural District.—As a result of special inspection of the district, a report was submitted to the Council dealing with 128 houses which called for action by repair, re-conditioning, or replacement. The Council decided not to erect any new houses, but to re-condition thirty houses each year under the Housing (Rural Workers) Acts for the next three years and, prior to 1937, to consider in what way the remainder of the houses can most economically and satisfactorily be dealt with.

Burford Rural District.—Reference is made to the decline of 8.6 per cent. in the population during the inter-censal period, and this is partly attributed to the fact that no working-class dwellings have been erected in recent years. In the opinion of the Medical Officer of Health a building scheme is overdue.

Church Stretton Rural.—There are many old cottages needing attention and, as their owners are without means to carry out radical improvements, it is recommended that they be assisted by grants under the Housing (Rural Workers) Act.

Cleobury Mortimer Rural District.—“Thirty houses with three bedrooms were erected by the Council at *Highley* It is a scheme that should be duplicated as soon as a suitable site can be secured. I understand the number of applications was considerably in excess of the houses available.”

Clun Rural District.—No definite programme of re-housing has been formulated, but the district has been surveyed and the results are under consideration. “Apart from the peculiar position with regard to the ownership of properties in this area, there is the difficulty that, if new houses are built therein, the occupiers are not likely to find any work, and there is no other area to which they can be transferred with a reasonable expectation of finding work.”

Drayton R.D.—“Owing to the present condition of the Agricultural Industry in this district, the particular problem appears to be one of unsuitability of houses rather than actual shortage. On account of the low wages usually prevailing in rural districts, the housing of the lower paid worker is a problem affecting a large percentage of the inhabitants.”

Ellesmere Rural.—“Advantage is being taken of the Housing (Rural Workers) Act. There is still considerable scope for its use, and it is to be hoped that owners of property will give this Act serious consideration.”

Wellington Rural.—“Thirty-eight houses were erected by the Council during the year The need for further houses . . . is to be considered at once.”

Whitchurch Rural.—“The Council, in view of the passing and division of the District, made no clearance programme.”

Church Stretton Urban.—“The Council has had a waiting list for some time in *Church Stretton*, while at *Little Stretton* the need for a few new houses has been urged, and recognised by the late Rural District Council.”

Dawley Urban.—It is stated that there is no hope of private enterprise solving the housing problem in the district, and that the very large number of families living in overcrowded cottages can only be dealt with by the Council undertaking to provide the houses.

Newport Urban.—Sixteen houses are being built by the Council to re-house families who will be displaced when the clearance orders come into operation.

Oakengates Urban.—Sixty houses have been represented for clearance and they are to be dealt with in five areas. Dr. White states :—“ There is still a very considerable list of suitable applicants for Council Houses, and a number of serious cases of overcrowding which require to be dealt with and which should be met by a scheme of fifty further houses.”

Oswestry Urban.—“ In July I presented a report to the Health Committee recommending the clearance of areas comprising 178 houses which I considered would greatly improve the housing conditions in the Borough if advantage were taken of the opportunity of providing the people living in these areas with houses and surroundings more in keeping with the modern standard of healthy housing.”

“ The Council, however, did not look upon my proposals with favour, and at present the matter is in abeyance.”

Shifnal Rural.—“ Further houses are still required at Shifnal to relieve overcrowding in the two bed-roomed houses that are so numerous in the town, and at *Albrighton, Stirchley, and Kemberton*.

Shrewsbury M.B.—“ . . . in order to relieve a certain amount of overcrowding and to provide a better standard of amenities which our younger generation aspire to, there is need for a few hundred more houses, and then we might pause and consider the future.”

Wem Urban.—“ There is a fairly long waiting list of applicants, and it seems that if the Council does not erect more houses the demand will not be met.”

Wenlock M.B.—Of the 197 persons to be re-housed in consequence of Demolition Orders, ten found themselves other accommodation, leaving 187 to be re-housed by the Council. “ The Medical Officer of Health and Sanitary Inspector are engaged in further investigation into housing conditions, and an extension of the programme is foreshadowed.”

The Madeley Sanitary Committee had under consideration at the end of the year a scheme for providing some fifty new houses.

Dr. Gepp states :—“ There appears also to be some shortage of this type of house (non-parlour) in *Broseley* ward, and the Committee might with advantage consider a scheme similar to those in *Madeley and Wenlock*.”

Whitchurch Urban.—“ As a result of inspection made by the Medical Officer of Health and the Sanitary Inspector, a list of thirty-seven houses was prepared, and representation made to the Council for their demolition and the re-housing of the occupants. The Council adopted the recommendation. . . . Some sites are now under consideration.”

WATER SUPPLIES.

While it is the duty of the District Councils to secure an adequate and wholesome water supply for the inhabitants of their respective areas, this cannot but be a matter of concern also to the County Council, especially in view of the recent prolonged drought, the ultimate effects of which it is impossible at present entirely to foresee. Although certain areas in the County are feeling the water shortage very acutely, it has so far not affected any very considerable number of people, and in a number of these areas the water supplies had never been of a satisfactory nature. It is these areas which feel the present shortage most acutely, and indeed it can be stated that in the County generally there is no real shortage of water, although there is often considerable inconvenience.

The problem of water supplies is one which even in normal times ought to be dealt with in a more comprehensive manner than heretofore. Increasing appreciation of the important part which an abundant and wholesome water supply plays in the promotion of health is resulting in an annually increasing demand for better and more abundant supplies in many areas, and twenty years ago a supply which would have been considered quite sufficient would now be regarded as totally inadequate.

This is a matter in which there is much community of interest, especially in certain areas, and Regional Water Committees (which of course would be purely advisory) ought to be established. These committees would be concerned chiefly with future developments in the matter of water supplies, but their establishment ought to result not only in securing adequate supplies, but also ultimately in effecting economies in the cost of water in many areas. A comprehensive scheme which met the requirements of a number of areas would, from all points of view, be much more satisfactory than a number of smaller schemes which dealt with the areas individually, although in a rural county such as Shropshire many houses and hamlets would have to depend on purely local supplies. It is difficult to see how these Regional Water Committees can be established unless the County Council takes not only the initiative, but also a very active part in their formation by carrying out a survey of the county and securing the advice of an expert with regard to the policy which ought to be pursued.

Under Section 57 of the Local Government Act, 1929, the County Council has formulated a Scheme to assist District Councils to secure satisfactory water supplies for the inhabitants of their areas, which ought to be of great assistance to those District Councils which are anxious to exercise their powers under the preceding section (Section 56) of this Act. The scheme is intended primarily for the benefit of Rural District Councils, but Urban Districts are not precluded from benefiting under the scheme, although the County Council reserves to itself the right to deal with each application entirely on its merits in all its aspects. The consideration which chiefly influenced the County Council in making the scheme applicable to urban districts also was the fact that the needs of certain of these urban districts are very similar to those of the rural districts, and a penny rate in the case of one of these produces as little as £21. The following are the particulars of the scheme :—

Conditions and Basis of Contribution.

(1) The County Council shall be satisfied that the Scheme towards which they are asked to contribute is necessary ; that the advantages thereof will be enjoyed by a reasonable number of people ; that the scheme represents the most satisfactory means of providing the service required, and that the Scheme would be carried out without undue hardship to the parish or place benefiting or to the ratepayers of the District.

(2) No application shall be considered unless the District Council is prepared to levy a rate over the whole District in respect of the Scheme.

(3) Any contribution made by the Councils shall be for the period of the loan raised for the works.

(4) The District Council shall avail itself to the fullest extent of such Unemployment or other Grants as are obtainable in respect of Schemes.

(5) Provided the sum raised in the parish, either by way of charges on consumers or by a rate levied on the parish, or both, is reasonable, and is in any case not less than two-fifths of the annual cost of maintenance of scheme, interest on and repayment of capital, the County Council will pay towards any deficit, after allowing for any grants available to the District Council, an amount equal to the sum contributed by the District Council.

(6) The foregoing conditions shall not prejudice the right of the Council to deal with any application entirely on its merits.

The following are the more important matters referred to in the Reports of the District Medical Officers of Health :—

Atcham Rural District.—“No acute shortage of water due to the dry season was reported or found during the year in the District.” Much work was done during the year in improving water supplies. “Investigations for increase or improvement of supply were under review as to the villages of *Bayston Hill, Berrington and Cross Houses, Bomere Heath, Pontesbury, Ford, Westbury, Minsterley, and Forton Heath*. In *Ford* and *Minsterley* villages the supply is in general from shallow wells in a contaminated sub-soil, and, although in normal times a sufficient supply for domestic purposes is obtainable, a supply from an outside source or deep well is desirable from the point of view of safety.”

Burford Rural District.—“Six defective private supplies were investigated at the *Knowle*, and a scheme for bringing water from a spring in Cleobury Mortimer District to a stand-pipe convenient to the houses is being considered. It will also give a supply to the proposed new school at the *Knowle*.” (Attention is also called to the necessity for the provision of a water supply to the inhabitants at the *Tittrail*, who in many cases have to carry it a quarter of a mile).

Chirbury Rural District.—“No acute shortage was reported in the district, though individual wells in places felt the effect of the drought.”

Worthen and Brockton.—It is suggested that the question of a public supply for these villages should now be re-considered.

Chirbury.—The desirability of increasing the capacity of the in-take reservoir by arrangement with the property owner is referred to.

Snailbeach.—Improvement in the supply was made during the year. It is considered that the supply could be made much more convenient by fixing a pump on the roadside above the outlet.

Church Stretton Rural.—**Cardington Village.**—“No action has so far been taken as to improving the supply to this village by making the water of St. James’s Well more conveniently accessible by the provision of a pump and draw pipe.”

Soudley.—“This hamlet, in which most of the houses have to carry water from spring wells considerable distances and over difficult ground in some cases, would benefit by a gravitational supply, if feasible, but no scheme has been thought practicable at reasonable cost.”

Cleobury Mortimer Rural.—“A scheme to collect water from the Gibbet Spring and pipe it to certain groups of houses in the *Coreley Parish* has been under consideration.”

“Considering the absence of rainfall for such a prolonged period in the summer, there were remarkably few complaints of the wells going dry in the area.”

Clun Rural.—“The serious drought affected a few of the public supplies of excellent spring water which have been laid on to the main villages in past years by the Council. The supplies chiefly affected were those of *Clun Town* and *Clunbury Village*.” There was a shortage of water also at *Newcastle, Clungunford, and The Cabin, Hopesay*.

Whitcott Keysett.—“. . . . the Council repeated its offer to provide a piped supply upon the owners or occupiers undertaking to connect their premises to the main. Refusals affecting about half of the houses were received, and the matter again lapsed.”

Kempton.—Tests of various springs were made with a view to providing a water supply for this village, but the rate of flow was not considered adequate for the number of inhabitants to be supplied. The matter is still under consideration.

Drayton Rural.—“The proposed water scheme to supply the village of *Hodnet* is now ready to submit to the Ministry.”

Definite proposals have also been considered to supply *Woore* with water from the Nantwich Rural District Water Scheme.

Plans have been prepared and submitted to the Rural District Council with regard to the extension of *Cheswardine* supply to *Sowdley*, and these are under consideration.

Ellesmere Rural.—“Nothing has been done to improve the water supplies of *Harmer Hill* and *Valeswood* where, it is stated, some of the inhabitants have to carry water for about a mile.”

Ludlow Rural.—Following the failure of a number of wells in the *Clee Hill* and *Knowbury* areas, water had to be carried long distances. It is hoped that by utilising the surplus water from the Gibbet Spring situated in the *Coreley Parish* the problem of supplying water to *Clee Hill* village will be solved.

Oswestry Rural.—During the summer drought it was necessary to ask the public to restrict the use of water to purely domestic purposes.

“The covering in of the storage reservoir at the *Mardy* is work which should receive your early attention: at present it serves no useful purpose owing to the growth of algae.”

Nantmawr.—“A supply of water is essential for this village, many houses being without water.”

Pentre (Kinnerley).—“At present, most of the inhabitants obtain their supply from an open ditch. Two schemes have been considered.”

Maesbury.—“A scheme has been prepared for submission to the Ministry of Health for supplying this village from the *Sweeney* source.”

Pant and Llanymynech.—“A scheme has also been prepared for improving the supply to this area.”

The Sarn, Moor's Lane, St. Martin's, and Rhosygadfa.—Attention is called to the poor supply to these areas.

Shifnal Rural.—“It would be of advantage if the main could be extended to supply certain houses in the *Donnington* parish where the supply is indifferent.”

Teme Rural.—“The position at *Bucknell* and in the *Kinsley* district of *Stowe* has been very serious, but at the moment of writing this report it appears highly probable that these two districts will shortly have excellent supplies.”

Wellington Rural.—“. . . Eleven wells at *Hadley* and *Ketley* were closed, and the Council's supply laid on to the houses that made use of them. A 4-in. main was laid from the old *Wrekin* Reservoir belonging to the Urban District, to *Wrockwardine* and *Admaston* and *Bratton*, and a branch was taken at *Wrockwardine* to the Council houses and *Burcot Farm*.”

Whitchurch Rural.—“*Tilstock* water supply is not above suspicion, but there is evidence that a public well could be sunk to give a supply of good drinking water accessible to all the houses in the village at very moderate cost.”

It appears that a well formerly used by the military at *Prees Heath* would be capable of giving an adequate supply to *Ash* and *Tilstock*, and would give opportunities for building development.

Bishop's Castle Urban.—“Notwithstanding the drought conditions of a considerable part of last year, an efficient supply was maintained in the town.”

Bridgnorth Urban.—“The adequacy of the present system of water supply for the Borough is receiving the consideration of the Council.”

Dawley Urban.—As a result of the erection of further Council houses, five million gallons more were used than in the previous year, and there is no doubt the district is rapidly approaching the maximum amount which the Borough of Wenlock agreed to supply, and that in the near future the water question will have to be considered with a view to augmenting it.

Newport Urban.—“The new bore-hole and pumping plant was completed during the year and put into operation in August. Mr. Bryan informs me that the capacity of the new pumps is 19,000 gallons an hour, more than twice that of the old one, and that the supply has been constant and the quality of the water has proved on analysis to be excellent.”

Oakengates Urban.—“The service was on the whole satisfactory during the year, although at times sand interfered with the pumping at the new bore-hole.”

Oswestry Urban.—“The consequence of the abnormal drought experienced in 1933 was that 30,000,000 gallons of water had to be taken from the Liverpool supply to augment the Council’s resources.”

Shrewsbury M.B.—“. . . . Notwithstanding the abnormal drought throughout 1933, a constant supply of water was maintained without restriction.”

Wellington Urban.—“The new water supply from the two wells at *Longswood* about $3\frac{1}{2}$ miles north of the town was completed during the year.”

Wem Urban.—“The supply is of good quality, constant, of sufficient quantity, and available for all dwelling houses and business premises.”

Wenlock M.B.—“No acute shortage of water due to the long drought was reported anywhere in the rural areas of the Borough.”

Whitchurch Urban.—“The public supply from the Council’s wells, bore tubes, and public supply at Fenn’s Bank was well maintained, and gave a constant supply The Council, during the year, decided to apply for sanction to a loan for provision of an additional storage reservoir of 200,000 gallons capacity alongside the present reservoir in *Pear Tree Lane*, and for modernising their Water Softening System and Plant. The Surveyor reports that plans and specifications have been prepared. He also states that, since the close of the year, a very successful series of borings has been made in the *Red-brook Valley* about half-a-mile below the pumping station, and that sanction to its development will be included in the Council’s application.

Four bore-holes were put down, to a depth of 36 feet, in sand and gravel, underlying protective beds of clay. The water rose above the surface. A pumping test, carried out continuously for fourteen days, gave a constant yield of 6,000 gallons per hour. The water was submitted to chemical and bacteriological analysis and was shown to be of excellent quality and of moderate hardness.”

SEWERAGE AND DRAINAGE.

The following are the more important matters referred to in the Reports of the District Medical Officers of Health :—

Church Stretton Rural.—“The drainage of *All Stretton* and *Little Stretton* as residential villages would be improved by systematic sewerage, and sewage treatment, obviating also some pollution of the streams.

“At *Wall* (Rushbury) a sewer, or road drain taking sewage, has been the source of complaint of nuisance arising from surface openings. The Sanitary Inspector recommended that the surface openings be sealed and a shaft ventilator fixed at the head of the sewer. No action has been taken so far.”

Ellesmere Rural.—“Steps are being taken to prevent pollution of a stream which receives untreated sewage from Petton Hall School and a County Council Small-holding. . . . A certain amount of pollution of the Tetchill Brook still exists due to the effluent from the Ellesmere Milk Factory. They erected a temporary plant to improve conditions, and the erection of a permanent plant was commenced, although not completed at the end of the year.”

Newport Rural District.—“Further complaints were received with regard to the serious nuisance caused by the streams and open channels which take drainage from groups of houses at *Donnington Wood*. The brook and the channels should be piped beyond the houses. Sore throats and sickness have been reported at a number of these houses during the recent hot weather, and a few of them are dependent on the shallow wells within a few feet of these open sewers for their drinking water. At one house the open sewer passes under the pantry window. The drainage system at Donnington Wood requires to be re-organised, and a scheme should be got out for that purpose now that it is proposed to build further houses in that area.”

Wellington Rural.—“The Council have appointed an Engineer to advise on the sewerage and sewage disposal of *Ketley*, and are awaiting his report.”

Dawley Urban.—Dr. White recommends the early re-consideration of the general sewerage scheme prepared by Messrs. Wilcox & Raikes in view of the proposed housing schemes.

Ellesmere Urban.—*Tetchill Brook*.—“A certain amount of pollution of this stream still takes place from Ellesmere Milk Factory due to the discharge of milk washings and whey.”

Oakengates Urban.—“The progress in the conversion of the privy closets to the water carriage system was considerably less than in the previous year, only twenty-four being completed. A number of notices are outstanding, many of them in populous areas, where night soil removal causes very considerable nuisance. It seems to me that informal action has failed in this matter and that legal notices should be served.”

Wenlock M.B.—“Investigations into the condition of the *Madeley Brook* were continued throughout the year, and an engineering survey was made with a view to the preparation of plans for consideration for a scheme of interception and sewage disposal. A number of analyses were also made.”

OTHER EXTRACTS.

Atcham Rural District.—*Scavenging*.—“There is no public system of removal of house refuse. In the case of the larger villages, public collection is very desirable for the health and convenience of householders, and to avoid unsightly nuisances due to scattered dumps of refuse thrown in ditches, or streams. The villages of *Bayston Hill*, *Dorrington*, and *Pontesbury*, are cases in point, and the Council has the question under consideration.”

Teme Rural.—*Refuse Tip*.—“A refuse tip is badly needed at Bucknell: the Council have for some time been endeavouring to acquire a site for this, but without success at present.”

Ellesmere Urban.—*Slaughterhouses*.—“All the slaughterhouses are in a very bad state of repair, the three in Jenk’s Yard having got beyond the state where repairs can be carried out. These should be demolished, and the one in Talbot Street closed for slaughtering as soon as a suitable alternative can be found.”

Oswestry Urban.—*Meat*.—“There is no doubt that a Public Abattoir would be a considerable asset to the town and to the butchers.”

TABLE I.
CAUSES OF DEATH IN THE ADMINISTRATIVE AREAS IN THE COUNTY OF SALOP, 1933—URBAN DISTRICTS.

TABLE I.
CAUSES OF DEATH IN THE ADMINISTRATIVE AREAS IN THE COUNTY OF SALOP, 1933—RURAL DISTRICTS.

TABLE II.
CAUSES OF DEATH AT DIFFERENT PERIODS OF LIFE IN THE ADMINISTRATIVE COUNTY OF SÄLÖP. 1933.

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